

NOTES OF A TOUR

IN THE

PLAINS OF INDIA, THE HIMALA, AND
BORNEO;

BEING

EXTRACTS FROM THE PRIVATE LETTERS

OF

DR. HOOKER,

WRITTEN DURING A GOVERNMENT BOTANICAL
MISSION TO THOSE COUNTRIES.

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PART I.

ENGLAND TO CALCUTTA.  
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LONDON:

REEVE, BENHAM, AND REEVE, KING WILLIAM STREET, STRAND.

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DR. HOOKER'S MISSION TO INDIA.

[The object of this Mission has been already stated, as fully as its nature will allow, in the sixth volume of the *London Journal of Botany*. It will suffice here to remark, that Dr. Hooker, at the recommendation of the Chief Commissioner of H.M. Woods and Forests, &c., has been appointed by H.M. Government to investigate the vegetable productions of certain portions of India, particularly the mountainous regions of Himalä. He is afterwards to proceed to Borneo, with a similar object in view. That the public may be in possession of some particulars relating to Dr. Hooker's progress and success, previous to the fuller narrative which will appear on his return, is the Editor's object in publishing the following extracts from the necessarily hastily written and familiar letters addressed to his friends at home.

The First Lord of the Admiralty, with the consent of His Excellency Lord Dalhousie, the newly appointed Governor General of the East Indies, kindly granted a passage to Alexandria, in H.M. Steam-Frigate "Sidon," destined to convey his Lordship to that place, *en route* for Calcutta. From Suez, our traveller formed part of Lord D.'s suite; and it is not a little gratifying to the writer of this notice to reflect, that, as he was himself indebted to the late Countess Dalhousie for a rich Herbarium of East Indian and Himalayan plants, collected by her when accompanying her noble husband then Commander-in-Chief, on his official tours; so will Dr. Hooker owe still greater obligations to the son of that distinguished lady, for the amplest means of prosecuting his botanical researches in the East.—Ed.]

I. OVERLAND ROUTE TO CALCUTTA.

H.M. Steam Frigate "Sidon," off Gibraltar,
Nov. 20th, 1847.

The Rock of Gibraltar is a truly noble object, whether in Nature

or Art, and worthy of a much longer visit than we were able to make to it. But I must first speak of Lisbon and the "Golden Tagus," in both of which objects, however, I was grievously disappointed. The former, like almost every object in Portugal, *looks best from a distance*. Its long rows of white-washed houses show filthy on a near approach; and the magnificent palaces of the old nobility are sinking, like their owners, to decay. Civil war has brought poverty in its train. In all the shops splendid jewellery and fine plate are offered at prices infinitely below their value, for money is not to be had. The streets are generally steep, and with hardly any exceptions very narrow: a few consist of houses eight or ten stories high; and here and there you come upon public gardens, enclosed with handsome and lofty railings. The suburbs are very extensive, and they swarm with wretched beggars and herds of quarrelsome dogs, alike annoying to the stranger. I saw no good trees near Lisbon, only *Olives*, *Evergreen Oaks*, *Orange*, *Pomegranate*, and the great *Datura*. We made an excursion to Cintra, fourteen miles distant, and losing our road, wandered among the low, rounded and bare hills, among which the Tagus winds its way. I was not sorry for the mistake and delay, for they enabled me to see more of the country. Vegetation was most scanty; the plants were all but burnt up, a few *Euphorbias*, *Genistas*, and *Bupleura*, some *Astragali*, and an unsightly *Centaurea*, alone remaining. In a village, to which we wandered and whence we were directed to the right path four or five miles distant, the scenery was prettier, for I saw water, green grass, groves of *Olives*, *Vineyards*, and scattered woods of *Oak*. Here and there were white convents with gay gardens round them. The hills showed a few *Stone-Pines*, bent by the winds, and in the bottom of the valley grew *Weeping Willows* and *Arundo Phragmites* (?). The agriculture is most slovenly, and the fields are enclosed with rough stone walls: the roads are not much better of their kind, being rugged and dusty, and adorned, at every mile or so, with the pile of stones and a cross, of which I need not explain the meaning. The only objects which struck me as curious and peculiar, are the windmills. Without having seen

a Spanish or Portuguese windmill (they are alike), it is difficult to understand Don Quixote's adventure: they are low and equipped with very broad sails, which, when set in motion, make the most extraordinary, hideous, howling noise, like the voice of a wild beast, which is heard half a mile off—a truly unearthly sound!

Our excursion to Cintra, however, gratified me, because of the scenery, where woods, castles, and convents, contrast pleasingly with the saw-edged (serrated) *Sierra*, its summits wrapped in the clouds, which rise from the adjacent Atlantic Ocean. The plain was covered with low bushes of *Genista* and *Ulex*, all out of flower; but many *Orchideæ* had pushed their shining green leaves above the soil. The coolness and verdure of the hills contrasted agreeably with the scorching plains, and we enjoyed our ascent through avenues of *Cork-Oak* and *Ilex*, which lined the road. Many points reminded me of Madera, but not to the advantage of Portugal. The rocks are by no means so fine, and Cintra lacks the luxuriant growth of *Fuchsias*, *Geraniums* and *China Roses*, which adorn every cottage in Madera. *Chestnuts*, too, are few; and I noticed no large trees of any kind. The rocks were, however, grey and green with *Lichens* and *Mosses*; while, here and there, grew *Cotyledon Umbilicus*, *Grammitis Ceterach* and *Adiantum*—all plants, characteristic of a western European vegetation.

Whilst the rest of the party, mounted on donkeys, visited the convent of Nossa Senhora das Penas (Our Lady of the Rocks), I climbed the rocky hills above the village of Cintra. I was rewarded with a splendid view, which comprehended the buildings below, the groves of *Chestnut*, *Oak*, *Cork*, *Lemon*, *Orange*, and *Pomegranate*, and many miles of the grassy undulating plains of Portugal, where I distinctly saw the lines of Torres Vedras, Mafra, and other places of scarcely less note in the Peninsular war, described by Napier. The sea is visible in two directions, as well as the widened Tagus above Lisbon. I was surprised at finding so much mist and cloud, at such a comparatively low elevation, about 2,000 feet, and at first I thought it must be accidental; but the multitude of *Lichens* which coated the granite rocks, as thickly, though not with such fine species, as in the

Antarctic Islands, afforded convincing proof of the prevalent humidity of the atmosphere, which is due to the vicinity of the Atlantic and the isolation of the heights which intercept the moist vapours. The *Cork-Oaks* were also hoary with *Ramalina* and *Evernia*, and some *Mosses*, mixed with amazing quantities of *Polypodium vulgare*; these trees reminded me of the Apple-trees in Normandy, wanting, however, the Misseltoe.

This Portugal is an almost desolate and comparatively uninhabited land, not so much from the faults of the Government as the character of the people. Often have I wondered how it came to pass, that a nation once so famous, and from whom sprung the precursors of discovery in both worlds, should have fallen so suddenly and so low. But it was GOLD alone that roused their energies: the Portuguese are naturally dirty, indolent, and immoral. It is hard to say what will become of them. The land is rich and productive, the climate delicious, and the people do not possess that warlike and romantic temperament which continually causes their neighbours, the Spaniards, to be in hot water. I have seen the Portuguese in Madera, the Cape de Verds, Brazil, and now at home, and they are alike everywhere, and I never wish to come in their way again.

To return to the rocky hill I was climbing, it was very barren, except of *Lichens*, and dwarf bushes of *Quercus*, *Ilex Suber* and *coccifer*, some shrubby *Labiatae*, a few *Linariae*, and such-like herbs. The autumn sun had scorched everything; but little shoots might be seen sprouting forth, indicating an early spring. Part of the hill is terraced for the use of the inmates of the Palace, and planted with multitudes of *Geraniums*, but little else. The top is a pile of huge granite blocks, capped with a small turreted castle, built apparently for ornament. After we had partaken of a fine dinner, provided by Lord Dalhousie, we returned to Lisbon, galloping all the way; for the little Spanish horses refused to make any halt, except at an hotel situated close to the place where the aqueduct from Cintra to Lisbon crosses the road. It must be allowed that the Portuguese excel in aqueducts; both this and the one I had seen at Rio are very noble structures. At the part where we

arrived, fourteen tall arches, each about one hundred feet high, spanned a broad valley, and their projection against the blue starlit sky had a fine effect. An echo here produced fourteen distinct reverberations; not from the fourteen arches, I expect, but from the air striking upon different parts of the one beneath which we passed.

I regretted not returning to Lisbon by the way we had left it, for I wanted to look again at the church of Belem, where Columbus dreamed that an angel directed him to the discovery of the New World; and where Vasco de Gama and his successors offered up, some their prayers, and others thanksgivings (to Saint Nicholas, by the way,) on the occasion of their voyages to, or return from, the East Indies.

The part of Lisbon to which we returned looked magnificent by night. Grand squares with piles of white buildings, six and eight stories high, glanced bright in the moon-beams, and so did the broad streets of palace-like houses, faced with gardens and gilded palisades. The heat of the day was over; the evil smells of the city were somewhat dissipated; the dogs had gone to kennel; and a few drunken sailors were the only disturbers of the peace. We were rather late for the Opera, which is vaunted, by those who know no better, as one of the largest and best in Europe. The house is certainly enormous; but the orchestra is very poor, the opera (*Lucrezia Borgia*) was ill performed, both as to acting, singing, and stage effect; and worst of all, the boxes, pit, and gallery were filthy alike, and the whole place so noisome, that I found it impossible to sit out the piece, and I slipped away quickly and returned to the "Sidon." The following morning we sailed for Gibraltar, whence I now write.

Altogether, Lisbon and its environs disappointed me; though there were parts of the city on which I gazed with deep interest. The historical associations are numerous, and of a kind peculiarly striking to me. There is the port, whence sailed the discoverers of the greater part of India and of the passage thither, by the Cape of Good Hope. The very church and convent, where public prayers were offered by Vasco de Gama and his brave associates,

are not only still standing, but are proudly pointed out by the inhabitants. Many curious remains of Moorish architecture exist in different parts of the city: heavy buildings of white limestone or marble, with long, high doors, and arches that expand above the middle and then taper upwards to a point. The lower stories of these edifices are generally handsome, their floors and walls of marble; but they, and indeed the entire city, wear such an air of dilapidation, and the customs of the people are so horribly filthy, that it is a penance, instead of a pleasure, to perambulate the streets. Gilded columns and porticos, and gay painting, do not compensate for the practice of throwing out every kind of dirt and offal before the doors.

It took us two days to sail from Lisbon to the entrance of the Mediterranean Sea. A strong current carried us on, with the shores of Europe and Africa on either hand, that of Africa being the loftiest, from the range of the Lesser Atlas, which runs along the kingdom of Morocco. Rounding Tarifâ Point, we opened the Bay and Rock of Gibraltar, the former bounded everywhere by bare hills, save at the point where the noble fortress projects its bold front into the blue Mediterranean. Gibraltar Rock is a peninsula, running north and south: it terminates to the south in Europa Point, which descends in steps or ridges, whereon stand houses and gardens; while northward, the bluff cliff, upwards of a thousand feet high, looks back to Spain and shows its three rows of teeth to the mother country. By these rows of teeth, I mean the parallel galleries hewn in the face of the rock, like long caverns, furnished with ranges of cannons, which grimly project through holes in the sides of the cliff.

We lay off the New Mole and took in coals. Southward we looked over the Mediterranean to Apes' Hill, on the African coast. The view was enlivened with many of the little latteen-sailed boats which figure in all views of the Mediterranean, and are here called Rock-scorpions. We landed and walked to Europa Point, among barracks, soldiers, guns and sentries innumerable, and ascended the western face of the rock, which has a very steep slope of 45° , covered with a scrubby vegetation, consisting chiefly of *Dwarf*

Palms, a few *Agaves*, &c. From the top, a narrow ridge about 1400 feet high, we obtained a glorious prospect both of the Spanish and African coasts. The descent on the east is a sheer precipice down to the sea, all but perpendicular; and nothing grows, at least at this season, among the confused masses of limestone, of which it, in common with the rest of the rock, consists. On the west side, by which we ascended, I observed, besides the *Agave* and *Dwarf Fan-Palm*, an introduced *Aloe*, *Asparagus*, some *Labiatae*, and a pretty species of *Arum*. The *Palmetto*, or *Dwarf Fan-Palm*, was to me the most interesting among this stunted vegetation; not merely because it is the only European Palm, but because it is the most northern species of the genus, as my old friend, the New Zealand *Palmetto*, is the most southern species known. Of the *Labiatae* there were several kinds, but none either in flower or fruit. The *Phytolacca*,* for which I sought particularly, is not to be seen on the wild parts of the rock, but it grows, apparently cultivated, in the gardens about the town. It forms a very handsome, leafy, rounded and massy looking tree, with a stout trunk, and rather short spreading branches; and appears, specifically, the same as that which I observed in the Island of Ascension, where it grows with such wonderful rapidity. I had seen a solitary *Phytolacca* at Cintra, but did not then recognize it. To have obtained, as I much wished, a section of the stem, for the Museum at Kew, was impossible: the trees are jealously guarded by soldiers, and in the public gardens it is prohibited to touch and pluck a plant, as with you at Kew. If we had stayed longer at Gibraltar, (but after spending six hours on the rock we returned to the "Sidon,") I could easily have procured the *Phytolacca* from a private garden. Its general aspect reminds me of the

* *Phytolacca dioica*, an arborescent species of Poke-weed, native of Buenos Ayres, but introduced into Europe by the Spaniards and Portuguese. It is remarkable for the softness of its wood. "Il est," says M. Bory de St. Vineent, "un assez grand et fort bel arbre, dont le tronc eependant conserve une mollesse herbaeée, telle qu'on peut le couper eomme on ferait d'une enorme Carrotte; il a été des longtems transporté et forme à Seville une partie de la promenade publique le long du Guadalquivir, près le pont de Triana. A la forme des feuilles et à la hauteur de plusieurs individus, on dirait des Peupliers."—ED.

Mango. If you have it not, in a living state, in the Royal Gardens, the Surgeon of this ship has kindly promised to procure it for you, on his way back to England.—[It has long been in the Royal Gardens of Kew.—ED.]

At Malta, I mean to enquire about the *Cynomorium*, and, if possible, to visit its habitat, which is, said to be on an insulated rock, sometimes impossible of access, about seventeen miles from the town of Valetta.

On board H.M. Steam Frigate, "Sidon,"
Off Valetta, Nov. 29th.

We have had splendid views of the Spanish coast since quitting Gibraltar: the glorious Sierra Nevada has been full in sight, its purple mountains, capped with snow, darting upwards into the bluest of all blue skies, and rising from the bluest of seas. The African shore was very unlike what I expected. Instead of a bare, sandy, hilly desert, we saw rugged ranges, clothed in the lower part with trees, and surmounted with the snow-sprinkled heights of the Lesser Atlas. Algiers, from a distance, looked a pleasant enough place to live in:—the town stands on a high and steep point, rising out of the sea, faced with formidable white batteries and castled fortifications, and dotted all round with wood-embosomed villas, probably the residences of the French conquerors.

The harbour of Valetta is magnificent. In our way to the coaling place, we passed the town of St. Elmo on one hand, and a noble building, the Naval Hospital, on the other. The shores are rather high, presenting terrace after terrace of batteries, crowned with castellated buildings, and within these again are houses and palaces, public and private, parades and arched arcades (called *Barracas*) on the heights, where the inhabitants seat themselves and look down upon the shipping below. In all directions you see rows of huge cannon in the foreground, or bluff escarpments, or long lines of masonry, enclosing piles of buildings, sprinkled with churches and convents, and bell-towers innumerable. The latter emit an incessant jangling: some of the bells have good voices and others very bad. Scarcely a trace of vegetation remains anywhere, except the Caper plant, which covers the rocks and

walls; and were it not for the cool colouring of the Malta stone, the heat of this place must be frightful in summer. The rock is all a pale yellow magnesian limestone, so soft that it may be easily cut with a knife; but it hardens on exposure to the air and makes an excellent and durable masonry. The water is deep in the harbour, up to the very batteries and wharfs, intensely blue and swarming with boats of all sizes, and ships of all nations. Two English line-of-battle ships, three war-steamers, together with some frigates and smaller craft, were all of our fleet then lying at Malta, the greater part of it being elsewhere in the Mediterranean.

I landed in the forenoon and ascended into the town of Valetta, through archways and all kinds of mysterious fortifications abundantly garnished with images of the Virgin, stuck in niches of the walls. The streets are steep, and there are many flights of stairs, crowded with people buying and selling, in stalls and little shops, all open to view, and tenanted by some of the most industrious people I ever saw. The town looks like a fair, or rather a hive; everybody has something to do and goes about it in good humour; there is no jostling or quarrelling. The streets, which run along the crest of the hill whereon Valetta stands, are continued from one end to the other, and intersected at right angles by others, which strike across from the waters of one bay to that of the contiguous one. All are very narrow, but clean and strikingly picturesque; they are straight, and the majority of them are terminated by the water as a vista, with its intense and yet brilliant hue. They form, so to speak, a sort of square telescope, with busy crowds along the bottom, handsome yellow carved stone balconies, projecting on either side, a bright azure sky above, and the sea like a perfect sapphire-stone at the far extremity. Roberts' and Daniell's fine water-colour pictures of scenes in the East have a reminding similarity to Malta, especially in the buildings and the blue sky; but I hardly think that anywhere else is there so happy a combination as is produced by the hue of the Malta stone, the lovely Mediterranean, and the stirring bustle of the streets. As a balance to these recommendations, it must be owned that the place is very hot and dusty in summer, and in rainy weather

muddy ; still the mud is *clean mud*, and there are plenty of good horses and calèches to carry the stranger about.

The buildings all over the town of Valetta are truly noble, the majority of them having been erected by the Knights of Malta, and consisting either of the palaces of individuals, or public edifices belonging to that ancient community, with not a few *Auberges*, as the dwelling-houses of the different Nations of Knights are called. It seems strange that among so many grand structures there is not a single really fine church. I speak of their exterior, for many are gaudy enough within ; but I should not have recognised even the church of St. John by its outward aspect. The church lately built by the English and founded by the Queen Dowager, is much the handsomest in Malta, and it is the only one which boasts of a spire. The Library, the Palace, and the Church of St. John are well worth a visit, though not fine of their kind ; and I heard of some attractive “Lions,” in the shape of convents, and bodies of monks preserved and exposed to view, but neither these, nor the catacombs, had I time to visit.

* * * * *

Every part of the town is full of associations, but none so much so as the Governor's palace, the old residence of the Grand Masters of the Knights of St. John of Malta. It forms a large and handsome quadrangle in Valetta, with one suite of show-apartments, none very fine, but many highly interesting. The walls of the Hall and best apartments are covered with rude frescos of the deeds of the Knights, attributed to Bolognèse, who is said to have been brought over from Italy on purpose. The origin of the Knights, the siege of Ascalon, and the birth of St. John, are among the first of these. In another room are Richard Cœur de Lion receiving his mission and benediction from the Pope, the repairing the walls of Jerusalem, reception of the Emperor of Austria, siege of Damietta, King of Hungary receiving the grand-cross of the order (the only monarch to whom it was granted as an honorary distinction), the taking of Rhodes, and many other subjects with which you are more familiar than I am ; or, if you

are not, pray read the History of the Knights of Malta, and of the Crusaders, published in Constable's Miscellany, which we have at home,—both very interesting books. There are no remarkable ornaments or very fine rooms in the palace, and but little good marble. The rooms are so far modernized as to be suitable for an unwarlike Governor of Malta, and are often disfigured by atrocious copies of the old masters. There are a few interesting old paintings, as a portrait of L' Isle Adam, one of the oldest Grand-Masters, and especially that of the Grand-Master Vignacourt by Caravaggio, a black and much-disfigured picture, often copied. The Tapestry-chamber contains about twelve immense panels of Gobelins workmanship, apparently much superior to what is at Blenheim: they represent allegorically the Four Continents, Europe, Asia, Africa, and America. An Armoury is shewn as something wonderful, but it really is disappointing; 17,000 stand of muskets is not attractive, and there is little old armour of interest, except the coats of armour of L' Isle Adam, Valetta, who built the town, and of Vignacourt, being the original suit of steel inlaid with gold in which he is always represented. There are also two cannons, with Arabic inscriptions, said to be 550 years old.

The Church of Saint John, the only other remarkable building whose interior I saw, is externally very plain, but within overloaded with sculpture and carving: except the tombs of some of the old Grand-Masters, and some of the more valiant Knights, there were few objects of interest. Being built of soft limestone rock, the whole interior is most elaborately carved, and the surface picked out with gold and blue stars, flowers, &c. Frescos, in a bad style, adorn the ceiling and walls, together with some miserable paintings. One of the latter is ascribed to Andrea del Sarto, a Flagellation, which I had much difficulty in finding, and, when found, saw only a mass of blackened dirty canvas, strained all awry and torn across the lower half. The shrines were profusely ornamented with gold and silver utensils, altar-pieces, &c. Conspicuous in this, a Roman Catholic place of worship, stands a throne on the left of the grand altar, with the arms of England worked on it, and thus betraying its appropriation to our Queen,

or her representative in Malta. After all, the street views and enormous proportion of nobly-faced buildings are the main attractions of Malta.

The harbour is always charming and enlivening, from the number of fruit-boats and the beauty of the surrounding waters, studded with white-sailed ships of all nations, from noble line-of-battle ships, smart frigates, and terrible-looking steamers, down to the gay pleasure-boats, and beautiful lateen-rigged vessels of the Mediterranean ports. Bands of music are playing all day long: they flock under the sterns of all vessels of high degree, such as the "Sidon," playing by turns, for a few coppers, the prettiest operatic airs, and remarkably well too. You are awakened in the morning by them, and in the evening again they re-assemble.

On Saturday morning I went on board the "Vengeance," to call on young Beaufort, the son of Admiral Beaufort, the Hydrographer, (who had come to Malta for health,) and I breakfasted with her Captain. We then went ashore, where I bought some carved stone for the Geological Museum. In this work the natives excel; and I procured a beautiful fluted pedestal, more than a yard high, with an elaborately sculptured vase of doves, ivy-leaves, and flowers, for twenty shillings. Afterwards we rode out into the country to the ancient capital, Medina, or Città Vecchia, as it is now called. The country is everywhere flat, and wofully barren, consisting of ledges of limestone rock, with scarcely any native vegetation, and here and there rudely ploughed and sown with wheat and vegetables. The number of churches is remarkable: in our six miles' ride I did not see fewer than ten or a dozen, all very large, and abounding inside with wax effigies of our Saviour and Saint Paul, rudely painted, and very frightful to behold. Every hamlet has its church; and any one of the latter would hold half the population of Malta. Stone-cutting and carving is indeed the besetting employment of the Maltese; and the facility afforded by the limestone has the same effect on this their hereditary disposition, that a soft deal bench has on a school-boy. At Città Vecchia there is little of note, but a huge church, some curious catacombs, and an extensive

prospect of the island, which looks like a broad ledge of white rock, spotted with churches, and girt by the blue Mediterranean. Much sanctity is attached to the place, from the belief of the inhabitants that Saint Paul lived there, and for years inhabited the neighbouring caves (or holes), and preached daily from the hill. Everything is attributed to St. Paul, and our geological friends would have laughed had they had presented to them for sale (as to me) some fossil shark's teeth, three inches long, as the teeth of the Apostle himself! The people are, of course, grievously ignorant, but very obliging and good-natured, constantly begging, and troublesome from the importunity with which they offer their services. I made a few sketches of the curious-looking country; but it is too barren for beauty, and not extensive enough to be otherwise interesting.

In the evening we went to the Opera, which is an excellent one, and well-provided (for the size of the place) with performers. Don Pasquale was fairly executed, the *Prima Donna*, especially, both sang and acted creditably. Malestrato was miserable, and "Come è gentil," a total failure.

I enjoyed my stay in this island exceedingly, and was the more glad to have seen it, being tolerably familiar with our two other fortified rocks, St. Helena and Gibraltar.

Cairo, Dec. 7th, 1847.

On Sunday morning the "Sidon" sailed from Malta, and arrived at Alexandria on the following Saturday morning. The passage was long, owing to contrary winds and a head sea, which, though slight, were sufficient to retard the "Sidon," which, despite her size and terribly grand look, is a very indifferent steamer or sailer, after all. At Alexandria, we were very busy preparing to leave the ship the following day; but every time I went upon deck for a few minutes there was something strange to look at in the various costumes of the functionaries who came on board on visits of ceremony or of duty to the Governor-General or the ship. Turks, Greeks, Armenians, and Egyptians, with not a few Arabs, swarmed up and down, wearing turbans, Fez-caps, gold lace, rich scymetars with diamond hilts, heavy

gold-embroidered shawls round their waists, and curious-looking foreign orders. It was always difficult to distinguish the servants from their masters, and the Dragoman or interpreter from both.

Alexandria is a ruinous city of dirty white houses, straggling round a broad bay, with nothing but its antiquities and associations to interest a stranger. Pompey's Pillar to the west of the harbour, and Cleopatra's Needle to the east, are conspicuous from the lowness of the coast before the land is visible from seaward. There are a few fine ships of Mehemet Ali's in the harbour, but he cannot man them; his palace is a large, tolerably well furnished, white square building, fronting the sea. Of trees there are scarcely any, except groves of *Date-Palms*, and a few *Acacias*; no herbs or shrubs, but in the wretched gardens. The soil is all limestone rubbish, blown about by the wind into your eyes, already sore with the glare of the sun. The outskirts are horrible, to a degree, consisting of clusters of huts, or rather mud hovels, grouped together in squares or quadrangles, not four feet high, each square about ten feet every way, with a hole for the door, and another to serve as a window. I went ashore about 2 P.M., and was at once besieged by crowds of donkey-boys, so closely that I had to use a stick to keep them off, till I selected one, and rode to Pompey's Pillar. It is certainly a very remarkable object, the shaft being one piece of granite; but like all such attempts at effect it is a failure, because the mind does not perceive at once the gigantic labour which the erection of such a single stone must have cost. Of this and Cleopatra's Needle I need say no more: they were exactly what I expected, neither more nor less, and any one can form a good conception of them, from reading the most ordinary account. I next went to the slave-market, and had to pay for admission into a small quadrangular court, about thirty feet square, surrounded with cells of about twelve feet, devoted to the slaves of each nation. These wretched holes were dark and dirty, and full of vermin, in spite of the smoke of a fire in the middle of the earthen floor, which all but suffocated the poor inmates. I saw only the Abyssinians, two or three squalid wretches, in a most abject state of filth, disease, and

suffering from the smoke which inflamed their poor eyes. They said nothing, but crouched behind the door and up in the corner on my entering.

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All of us regretted leaving our kind hosts and friends on board the "Sidon," to most of whom we had already become much attached. Captain Henderson is one of the mildest and most gentlemanly of men: he, with six or eight of the officers, accompanied us to Cairo. Our route was on the Mahmoudie Canal, which communicates between Alexandria and the Nile, running east about eighty miles, and our conveyance was a little steamer, of the size, shape, &c., of a Woolwich boat: she is the property of the Transit office, for the conveyance of passengers, but devoted to us for the present. There was no comfort on board, and we were much crammed with Drago-
men of all sizes and stamps, officials, luggage, &c. This canal was constructed by Mehemet Ali, who forced the Egyptians to work, without pay, or even bread or tools: 60,000 are said to have been starved to death; but we may hope this is exaggerated, being much above the number given in the hand-book of Egypt. All along, the banks are bare, or where you approach the lake Mareotis, rushy and reedy; except the *Tamarix* there are no bushes, and occasional *Dates* or *Acacias* are the only trees. The scenery reminded me of the canal through the bog of Allan, if you can suppose that wholly destitute of any vegetation, except around the very scattered Egyptian or Turkish houses, where are scantily furnished gardens of *Acacia*, *Cypress*, *Myrtle*, &c. At 10, A.M., we reached the Nile, descending to it through a lock: it rained tremendously, and we got very wet during the embarkation. Here we were received on board a very pretty steamer, of the size of a Greenock boat, very swift, and well-built and found: she is the pleasure yacht of Mehemet Ali, which he placed at our disposal. The after part was given up to Lord and Lady Dalhousie: it was gorgeously fitted with white shot satin, all worked with gold and scarlet flowers, heavy gilt and silver ornaments, Turkey carpets an inch thick, and everything in the most

costly and splendid style, short of solid gold and jewels. Only Lord and Lady Dalhousie enjoyed this splendour, however, for we messed on deck ; and the accommodations for the rest of us, including the prime minister of Egypt, were comparatively poor, and consisted of little cabins with sofas, and no washing appurtenances. We had to sleep two in each cabin, happily the weather was remarkably cold, and for washing we were sore put to, till we bethought ourselves of the tin cocked-hat boxes, which, opening through the middle, made two basins at once. Our repasts were sumptuous, served in the French fashion, and with French cookery, on silver and gold plate.

Next morning we were half-way to Cairo : the Nile looked a tame river, but association gave interest to its ordinary features. It was about as broad as the Thames at Kew, turbid and rapid, the stream flowing three miles an hour, bringing mud from Upper Abyssinia, the fabled Mountains of the Moon, Lake Dembir, and all the countries I used to read of, years ago, in Bruce's and Salt's travels. The banks are cliffs of mud, ten to twenty feet high, steep, and showing the successive layers of deposited soil, to which Egypt owes all its scanty store of vegetation. On these cliffs, or rather banks, we saw the Camel or lonely Dromedary stalking along, with his Arab master before, or upon him ; the latter turbaned and clothed, as all our associations picture him to be. At other places we observed groups of tents, with camels and donkeys around, an *Acacia* or *Sycamore* on one side, and a *Palm* on the other ; little scenes, wholly oriental, and as different from anything English as are those of the other countries I had visited, many thousand miles further from home. Beyond the immediate banks spread wide deserts of sand, wholly untenanted and uninhabitable, except by the wandering Arab. Here and there a little irrigation is attempted, by means of a broad wheel with many buckets attached to the whole circumference, and worked by a bullock. Of houses there were very few, and built near trees of *Palm* (*Date*), *Sycamore*, *Acacia Lebekh*, but no other that I could see. Boats were numerous, such as are figured in Bruce's Journey, and many subsequent

ones, though I remember none so well. All have high sterns, with a sort of houses on them, and are full of men, women, and the products of the soil. Sometimes their tall yards are descried for miles inland, and even over the sand of the desert, when a fleet of them is on another branch of the Delta whose waters are out of sight.

At three, P.M., we had our first view of the Pyramids, on the right bank of the river. At this distance, about forty miles, they appear like little blue cones on the horizon, not large enough to be wonderful, as objects of art, nor small enough to escape observation altogether. The first view of Cairo is very grand, especially at sunset, when the sinking sun darts forth golden beams along the mysterious desert, lighting up the Pyramids, which appear in strong relief, and gilding the white hill that overtops Cairo, with its citadel, mosques, and larger buildings. The fertility of the banks of the Nile increased as we neared the city, the belt of verdure being itself very broad, and the wooded portion of it, on the immediate shores, becoming more dense. A few miles below the town are Mehemet Ali's country-gardens and palace of Shoobra, a very pretty but formally arranged spot, loaded with *Orange-Trees*, enclosed by clipped hedges of *Myrtle*, *Geranium*, *Hibiscus*, and other plants, disposed in figures amongst gravel walks.

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We arrived at Koolva, a place on the Nile a few miles below Cairo where Mehemet Ali had a palace prepared for us, about 5 o'clock in the afternoon. There the Governor-General landed, accompanied by those who must be with him, whilst I went on with a party of the officers to the city, in preference to being located so far off. At 9, we reached the landing-place, where the Pacha had carriages waiting to conduct us whither we pleased, the servants bearing lighted cressets. Our party consisted of two Lieutenants, Perrier, son of the Consul at Brest, and relative of J. W. Croker, Esq., and Porcher, who was with Capt. Blackwood in H.M.S. Fly; two Midshipmen, Mr. Calcraft, a relative of Lord

Dalhousie, and the Hon. Mr. Bridgeman, son of Lord Bridport; the Assistant-Surgeon of the "Sidon" (Russell); Mr. Chalmers, a Scotchman, and nephew of Capt. Henderson, who is on board the "Sidon" as an invalid, and another young gentleman. We went to the British hotel, kept by a Scotchman, to which Captain Henderson recommended us; but it is a wretched house as far as meals and attendance are concerned. The greater part of us took two-bedded rooms. As to the houses here, they are more like holes in quarries than anything else,—great white-washed crumbling stone edifices, smelling of mortar and plaster, when the sun is not strong enough to raise any worse odour. We were very tired, but, after supper, were tempted with pipes, and Syrian tobacco, with which we lounged on long divans, and looked very Oriental. Mosquitoes there were in plenty, and as they got inside our curtained beds, we had no choice but to smoke them out before lying down.

The first thing we did this morning was to visit the Turkish bath, a novelty to us, and greatly needed after our uncomfortable night's accommodation on board the little steamer. The morning was cold, only 68°, and we preferred walking to riding on jackasses, the universal mode of conveyance here. All the roads we travelled were suburban, and broad, with huge tumble-down houses on one side, and a row of *Acacia Lebekh* trees on the opposite, or odious narrow lanes of smaller buildings, rudely plastered and white-washed, with windows and balconies so projecting as almost to meet overhead. Pray look in Lane's edition of the Arabian Nights for admirable sketches of them; but imagine also the roads unpaved and dusty, the walls very dirty and dilapidated, and the wood-work of the pretty lattices unpainted, brown, and ricketty, like an old cane-bottomed chair. The charms of these Eastern houses are all ideal and in the abstract: to live in them must be detestable. Even at this early hour, all the *shops* are open, if by that name you may designate little holes in the sides of the streets, where the faithful squat in their slippers, and smoke, pray, and drink coffee all the day long, each with a sallow or black attendant, who plays shop-boy, cheat, and pipe-feeder to

his dingy lord and master. Jackasses and turbanned Arabs throng the streets so densely that you are glad of your Dragoman, who precedes you with a short cane, in the use of which he is by no means scrupulous. But the great Dromedaries, though fewer in number, are far more troublesome than the people; they carry huge packages on their sides, stride along irrespective of man or beast, poking their heads out before them, like geese going under a barn door, grunting dissatisfaction at their load, yet bearing it very patiently all the while. The hoofs are the most curious part of these animals, being great orbicular elastic pads, which collapse, as it were, when the foot presses the ground, much as an accordion does, but without the music. However, I must hurry on to the bath, to reach which we wound through many nasty lanes and streets of shops, which are called bazaars, but which I should rather yclep "*Vennels*," if you remember the Glasgow holes of that name. After all, a Cairo bazaar is very like a Greenock street, without the windows.

Arrived at the bath, we were ushered into a marble-paved quadrangle (none of the cleanest), open above, with seats all round, upon which many of the faithful were distributed, in all stages of preparation. Though these are the best baths in Cairo, they seemed anything but select, either as to their attendants or cleanliness. To undress, we mounted a sort of stage, or dresser, covered with dirty sacking beds of questionable character. A man, or rather the spectre of a man, worn to skin and bone by the enervating influence of the bath, then took us, one by one, clothed in airy garments, and shod in sabots, through many dark passages to the bath-room, a dark, dirty, domed chamber, with a bath of muddy water at 94° in one corner, the stone-work of which abounded in cockroaches. In the middle was a stone fountain of hot water at 123°. All assembled, one by one, in the bath-room, and were unceremoniously popped in, four at once, and splashed, then taken out and flayed with small hair-brushes; anon scrubbed with black soap, some of which I have still in my eyes. After a sort of drying I thought all was concluded, when the spectre came up to me carrying a basin of scalding water, which

he, without any notice, threw at the pit of my stomach, causing me to spring back, slip, and measure my length on the marble floor. When recovered, I was shaved, without soap or lather: "Crossing the Line" is nothing to it; for a razor is scraped along the face and pressed hard against it at right angles to your visage, as you scratch a written word out of a letter. When the barber came to my throat, I felt very uneasy, and but for shame would have run away. The shave, after all, was an exceedingly bad one, which I repeated at the inn an hour later in the day. After ducking, dry-rubbing, and polishing, we were dressed *à la Turc*, with turbans, and deposited in a tolerably clean bed, side by side, like herrings in a barrel, where pipes and coffee were brought to us. This we enjoyed till a Shampooer (or Lampooner, as our friend in Ireland has it) came and kneaded my limbs with his knuckles, cracking all the arm, finger, and toe-joints. He then put his knee in the small of my back, and screwed my body round, as you wring a fowl's neck, till I heard the gristle of my backbone crack, and concluded by giving my head a wrench on my shoulders which left me a crick in the neck. After, and during dressing, we were stunned with repeated prayers for "Backsheesh" from all those officiating in the ceremonies, and with difficulty we got away minus 3s. a head, and plus a good many fleas, which we had not before.

Lord Dalhousie having asked me to call for him in the morning, I repaired on the back of a jackass to the Palace his Lordship occupied, about two miles from Cairo. The road led through an avenue of *Acacias*, but was otherwise dusty and disagreeable, till I reached the Palace gardens. These are very pretty but uniform, formed of hedges of clipped *Myrtle*, *Geranium*, *Hibiscus* *Rosa Sinensis*, and groves of *Orange*, *Lemon*, *Citron*, *Bananas*, and *Olive*. Occasionally, *Jessamines* were trained over head; and the effect of the evergreen foliage which predominated, was always agreeable and bright. At the door of the Palace I found Fane and Courtenay smoking long pipes, after the manner of the Faithful. Upstairs were Lord and Lady Dalhousie, and a party of official gentlemen, including the Honourable Capt. Murray, of Pembroke

Lodge, Richmond Park, (whose brother is Consul-General here,) who gave me a cordial welcome. His Lordship kindly invited me to accompany him to the citadel at 2 o'clock, to be introduced to Mehemet Ali, and to bring as many officers as were inclined to come. This over, I rode back to the inn, and took another donkey for the Rhoda gardens, belonging to Ibrahim Pacha, (now in Italy) which are superintended by a Scotch gentleman, Mr. Traill. But as I shall mention them in another letter, I here content myself by saying that Mr. Traill received me and the plants from Kew very kindly, and that he will in return transmit seeds of the celebrated *Doum Palm*,* to obtain which he will send to Upper Egypt, the only place where it grows.

I returned to the inn with barely time to dress for the Pacha's Palace, whither we repaired in a handsome carriage full of officers. The road was long, through narrow and very crowded streets. We were preceded by two running attendants with long whips, which they laid about them right and left, to clear the way, utterly regardless of man or beast, who scurry out of the way, or cower under their Bernouse cloaks to fend off the blows. I saw an unfortunate Egyptian, whose cart struck across the street, receive a terrible whipping, to which he offered not the least resistance. We were rather late, and arrived just after the Governor, and as the guns were pealing forth a royal salute. Passing under the gates through a magnificent new and half-finished alabaster mosque, (see the Panorama of Cairo,) we arrived at the quadrangle, where the Governor-General and his lady were alighting from a splendid six-horse coach, like the Lord Mayor's, with Egyptian Lancers as out-riders. The band played a sort of "God save the Queen" to their Excellencies, and I know not what to the second carriage, conveying Fane and Courtenay; but I was honoured with the Bohemian Polka for my share of the instrumental greeting. The

* Mr. Traill has already performed his promise: seeds in beautiful condition have reached Kew. The *Doum Palm* is the *Cucifera Thebaica* of Delile, who was the first modern author to give a detailed account of this singular *dichotomous* Palm. Theophrastus described it under the name of *Cucifera*, which Gaertner changed to *Hyphæne*. It is known to the Arabs by the name of *Doum*. The wood is valuable; but no use is made of the fruit.—ED.

gateway was crowded with tame-looking, fiercely-armed Egyptians, equipped with gorgeous sashes, diamond-hilted scymetars, and the like. Behind stood plainly-dressed attendants, on a dais, each wearing a gold badge on his breast,—the Crescent and Star of Egypt; they passed us on through gorgeously-furnished apartments, divaned all round, and covered with the richest Turkey carpets, to the private audience chamber. It was splendid, hung with looking-glass; the walls, above the mirrors, are covered with pale satin worked with crimson and gold flowers. The windows were fifteen feet high, having transparent blinds wrought with most exquisite groups of flowers, admirably imitated. All round were sofas and cushions of satin, embroidered with Carnations, Fuchsias, and Roses. Mehemet, an old, cunning-looking man, in a plain olive-green braided coat, sat on the right hand corner, near the window, but he received us standing. He conversed with Lord Dalhousie by means of a Dragoman interpreter, we being all arranged round, and forming a gorgeous *cortège*. Behind were several gentlemen, including the Pacha's son and son-in-law, and many plainly attired domestics. In a few minutes each of us, including Lady Dalhousie, was furnished with a pipe six feet long, its amber mouth-piece as thick as my wrist, and eight inches long, studded with brilliants. The bowl was placed in a silver dish on the ground, and we all whiffed away. The servants then brought coffee in little egg-cups, set in gold filagree holders, blazing with diamonds. The coffee is not made like ours, the beans being ground to paste, the liquid thus consisting of coffee grounds and all, for nothing is thrown away. In this form it is tolerable, but to an English palate not so good as our's, being turbid. The same attendants removed the pipes and coffee cups, and we retired much pleased with the novelty and magnificence of the scene.

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The city of Cairo is built at the fork of the Delta, on the advancing spur of the first range of hills we had seen on our passage up from Alexandria, and which reaches from the Eastern Desert to the left bank of the Nile, there sloping down rather abruptly and presenting a fine site for the citadel, with its beautiful mosque

and palaces. All the little features of the banks of the stream, between Aftéh and Cairo, which are familiar to us by Scripture History, and here realized for the first time, are forgotten, when Cairo and the Pyramids open to the view; for these are the first grand objects which force themselves upon the notice of the most heedless traveller. To me, however, the banded cliffs of mud along the banks were very suggestive, for they indicate the successive deposits of fertile soil, and as many epochs of rejoicing throughout the narrow belt of habitable land in Egypt, from the earliest ages, and through every change, however violent, which this miserable country has undergone. At the time of our visit (beginning of December), the Nile had just resumed its proper channel; and the banks, on either side, were, in some places, alive with the poor Fellahs, hurrying the seed into the mud. At Cairo, the belt of productive soil (which is everywhere confined to the overflowed portion) does not exceed five miles broad on the right bank, and not one upon the Cairo side; but the best use is made of it. Considering the vast size and body of water in the Nile, and the prodigious length of that river, its effects are trifling, less, perhaps, than from any river of the same dimensions. This is owing to the nature of the Desert through which it flows, and to the immense distance from which every particle of the precious mud is transported:—also, to the fact, that it is only the lesser branch, the Blue Nile (that of Abyssinia, and explored by Bruce), which contributes *at all* to the fertility of Egypt. On the other hand, if we reflect upon what the country would be without the Nile, its importance and effects can hardly be sufficiently estimated; for indefatigable as the river has been, it has not deposited more than eight feet of soil, since the time of the Ptolomies.

The Pyramids are on the opposite side of the Nile from Cairo; and the distance being about twelve miles, by road, (further or nearer, according to the state of the inundated intervening country,) we made arrangements over-night for starting early the following morning. At six we took donkeys, provisions, and two Dragomen, and passed through the narrow alleys and under the latticed windows of Cairo, to a place opposite Ghizeh. On our route we

observed many palaces, belonging to wealthy merchants and princes, gardens, groves, and plantations, near the river; the School of Languages, and the Sugar-mills belonging to the Pacha; Ibrahim's Palace, named Rhoda, and a half-finished (apparently never to be completed) aqueduct of five arches, destined to convey water from the Nile to the citadel.

The spot where we crossed the Nile is highly picturesque, opposite the upper end of a long island, where the famous Nilometer is placed. The banks on both sides were crowded with latteen-sailed boats, and green with *Date-Palms*, *Acacias*, *Sycamores*, and *Sugar-cane* plantations. The river was a magnificent stream, as broad as the Thames at London Bridge, or thereabouts, shining in the sun, and flowing with a current of between two and three miles an hour, studded with boats, and evidently rejoicing in its course. We beheld the Pyramids six miles off, in a straight line; they rose above the Palm-trees, and looked grand in the distance; altogether different from anything that can be seen elsewhere. But they are so infinitely more curious than handsome, that it is impossible to help feeling that in *many* other shapes these wondrous masses would have appeared bigger, and in *any* other, more attractive. In themselves, they do not invite, as most remarkable objects would do, a closer inspection; it is the force of association which compels you to approach, together with your previously acquired information respecting the *empty wonders* they enclose.

The island, on which the Nilometer is situated, is walled from the water far above the level of the soil; its houses and green trees, however, peep over the wall, the latter (the trees) *Dates*, *Oranges*, *Acacia*, and *Banana*, being of highly varied heights and hues, and giving the whole a very pleasing appearance. The upper extremity of the island is occupied by the building, in which the height of the Nile is registered: there is nothing to be seen in it, yet it is an interesting object, for, if I remember aright, the former, (and I dare say the present,) rulers of Egypt have a mode of regulating the corn-market, by suiting the official report of the state of the river to that of their granaries. Exaggerating the

height of the waters is tantamount to promising an abundant harvest for three years, and thereby lowering the price of the corn already in hand.

We crossed the river in a boat, similar to what is figured in Bruce's Travels, and called a *Canjan*. We were in a small one, and the asses followed in another. During the passage, I had time to make two little sketches,—one of the opposite bank, Ghizeh and the Pyramids, from the east shore,—and the other of the Nilometer and Cairo, from the west,—in each instance, looking across the noble stream. Both banks were equally thronged with filthy Egyptians, of all mixtures of blood; pure and mingled Ethiopians, Nubians, Abyssinians, Turks, and a few Copts, whom I suppose to be the most peculiar race; at all events they appeared to have the long almond-shaped eye, so conspicuous in the sculptured figures of ancient Egypt, and quite different from the Turk or Arab eye. I was unfortunate in meeting with no person in Cairo who could give me information on this and many other points: all the individuals to whom I was recommended were away.

From Ghizeh, the village to which we crossed, and from which the Pyramids take their name, we struck inland, through cultivated fields and Date plantations for a little way, and then over a long flat, without house or tree, and all cut up by little canals and dykes, retaining the waters of the late inundation, and distributing them in every direction. The soil is a rich fat mud, through which the naked Arabs were wading, scattering seeds of Pulse, Tarcs, and such vegetables. We wound along the margins of the enclosures for many miles, by a course so devious that often our backs were turned to the Pyramids. The latter looked bigger and bigger as we approached, till we arrived within two miles of their bases. Our progress was arrested by broad beds of mud and clay, puddly canals, and chains of Lagoons, which, together, constitute the outer limit of the fertile soil on the west boundary of the inundation. In these pools a great body of water is retained, which gradually evaporates and leaves its bed dry, previous to the following year's rise of the Nile. Ere reaching them, we were met by parties of

Arabs, who scampered up to us and led us to the brink of the pools. There two of them lifted me off the donkey, and forthwith making a Queen's chair, transported me half across, landing me in some rich mud, covered with Maize stalks. Thus we were all conveyed, riding at times, then splashing through the wet, and again carried by two naked and evil-smelling Arabs, till we arrived at some hard soil, a mixture of mud and sand, on the edge of the Desert. An abrupt cliff of limestone and sand rises immediately above the half-inundated tract I have described, and upon it are placed the two grand and several lesser Pyramids, the Sphynx below them on the slope of the sand-hills, and the mouths of the Catacombs on the cliff: a strange assemblage of objects bearing no obvious relation to each other. From here, the Pyramids looked vast indeed; but, as we approached still nearer, owing to the fore-shortening of their sloping faces, they rapidly decreased to appearance, till when standing under their bases, it required both study and consideration to appreciate their gigantic dimensions. The perspective of each face is so rapid, that you would positively think a few strides are all that lie between the bottom and the top.

As to the Sphynx, it is truly stupendous, and looks larger and larger as you approach; no doubt, because it is an object directly comparable with that ever-present standard,—*one's self*. Of merit of execution it has none: grandeur, beauty, placidity, and dignity, are alike wanting; there is not a worse and more ineffective piece of workmanship in St. Paul's or Westminster Abbey. Like the Pyramids, it is wonderful and suggestive to an educated individual, but nothing more. The poor face is terribly knocked to pieces, and as it can never have had any loveliness to spare, you may guess how flat and unengaging an object it is, buried up to the throat in sand and rubbish, and looking as unable to help itself, as it really is. One likes to relieve a noble piece of art, but it is impossible to pity the Sphynx.

The bases of the Pyramids are covered deeply with rubbish; so that the rock on and with which they are built, and which forms a core, eight feet high, in the centre of the largest, is nowhere

visible. I had only time to go over one properly, the Pyramid of Cheops, whose dimensions you doubtless know, 456 feet high, and each base 763 feet. The crowd of vociferous and importunate Arabs who surrounded us here, impeding our motions, and menacing us with a colony of vermin, was most disagreeable. They all belong to one tribe, and are under the Sheik of the district, who pays tribute to the Pacha, and demands money for permission to ascend, or enter the edifices. Two naked beings take you to the top, scrambling like cats, and dragging you from ledge to ledge. As the steps are much higher than they are broad, each measuring four feet and two-thirds of a foot high in the lower tiers, the ascent is fatiguing, though it may be accomplished in ten minutes. All parts, except some of the interior, are formed of shell-limestone, the same as the subjacent rock, of a pale yellow colour, and tolerably hard. The whole was once cased in a still harder rock, which, receiving a beautifully smooth surface, rendered the slope of each face as sheer as polished marble. But all this casing is gone from the Great Pyramid; a little only remains at the apex of the second, or Pyramid of Cephrenes, which is thus rendered all but inaccessible. The view from the summit is magnificent. Beneath, looking westward, lies the emerald plain, through which sweeps the mighty Nile, sparkling in the sun, as it winds through groves, gardens, and cultivated land. Beyond rises the city of Cairo, a dense mass of white houses, and minarets like spear-heads, crowned by the Citadel, with its monster castle, domes, and pinnacles, and backed by the white cliffs of the Mohattem Hills. Looking up the Nile, the ribband of verdure appears to dwindle to nothing, as the river retreats into the desert, its course *buoyed* out, so to speak, where it traverses the sandy plain, by two other groups of Pyramids on its banks; beyond which the eye perceives no outline, or horizon, to the sand hills. Due S. E., in a line with the diagonal of the great Pyramid whereon I stood, the second Pyramid rose, about 300 yards distant, of nearly equal height, capped with the relics of its casing, and terminating in all but a sharp point. At its foot were little Pyramids, awkwardly placed, without reference to the parent one, and much dilapidated. All to the west was bathed in the

yellow haze which overhangs the sand-hills of the vast Lybian Desert.

I took a few sketches of these scenes, the grandest, perhaps, but certainly the least attractive I had ever viewed; and after collecting all the Lichens I could find on the stones near the summit (where alone they grow), I descended, and made arrangements for visiting the interior. There I was highly interested. Though hurried by two Arabs along the slippery inclined passage, choking with heat and dust and crouching on hands and knees, I perfectly remembered every passage and chamber, every ascent and descent. The intense interest, with which I had read, when a boy, the history of the entrance and exploration of this Pyramid, was vividly recalled to my mind; and I astonished my companion by telling him when we were approaching a well, a chamber, the ascent or descent, &c. The incomprehensible form of the avenue which leads to the upper or King's Chamber, which is many times higher than broad, and its sides, above, terraced outwards, as it were, with slabs of polished granite; the polished canal, along which the Sarcophagus was dragged; and the Sarcophagus itself,—all were familiar to my mind; even to the polished granite stones of the chamber, and their dimensions, each seventeen feet long by three and three-quarters wide. The inside of the Pyramid was to me incomparably more striking than the exterior; perhaps only because it had afforded to my memory a most happy occasion of rejoicing in its exercise, and because our earliest reading is retained the best.

There is one grievous disappointment in the Pyramids, and it is increased by visiting them;—I mean their utter futility. It is now, I believe, proved that they are simply the mausolea of individuals. When I was a child, I was used to regard them as having been constructed for a triple object (any one of which were better than the commemoration of a mere mortal), namely, as astronomical buildings, as places of worship, and as edifices dedicated to the Genius of the Nile, whose waters brought fertility to their bases. If any of these ideas had been correct, the Pyramids might, when more understood, have thrown

some light on the science of the Egyptians, and though mixed up with astrology and mythology, they would have given evidence that their constructors possessed a faint insight into truths, which, till lately, were hidden from ourselves. The Egyptian priest, who told Pliny (I believe) that the Atlantic Ocean contained islands, bigger than Europe and Africa put together, might have left in the Pyramids some further proof of his conviction that there is a Western World, if Science had, either wholly or in part, suggested the foundation of these structures. Our early prejudices are thus liable to be continually outraged. Yet I hardly see why we should be sorry to find out, that our predecessors were less wise than we had supposed them.

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Cairo I found a most interesting place, for everything but botany. The city, as perhaps I have already mentioned, is situated on the slope, or spur of a long range of hills, which there dips down to the Nile. To the south there is little space for cultivation, the desert coming close up to the river, leaving but a narrow strip, of which every advantage is taken : on the opposite side, however, the belt is broader, some miles across, extending from the Nile to the desert, and kept fertile by canals, cut between the river and a long line of puddles, which run parallel to the Nile, but close to the desert. There are no trees, except upon the banks on either side, and these almost exclusively Date-Palms, in clumps and groves, *Acacia Lebekh* in long avenues, and scattered Sycamore figs. All the Date-trees are spoiled, as to appearance, from the dead, or dying, leaves being invariably cut away, when the Palm shoots up a long naked rough-looking and hungry stem, forty to sixty feet, crowned with a formal tuft of fronds ; at this season the fruits are all gathered, and of these there are eight or ten varieties, large and small, yellow, red, purple, and almost black. A little grass grows under their shade, or sometimes wheat is planted. The fields are all laid out in squares of various sizes, carefully irrigated from the Nile, the water when required being raised by wheels, whose tires are covered with large pots, and the whole moved by a bullock. There are but few hedges and they are chiefly of Prickly-Pear or *Parkinsonia aculeata*,

the latter very beautiful, from its bright green and feathery foliage. Close to the river the crops appeared to consist of Sugar-cane, Hemp, Tobacco, Sesamum, Cotton, Coffee, Rice, and Indigo, with scattered Oranges, Lemons, Bananas, Mulberries, *Ceratonia Siliqua*, and a few other trees, but the fruits are chiefly confined to the walled gardens of the richer Egyptians. The Sugar-cane appeared a very small kind, much smaller than the commonly cultivated one, which is the Bourbon, I believe, such as you have at Kew. Further from the town and river, the great alluvial deposit, which alone is fertile of all Egypt (except the Oases), is rudely cultivated with various *Leguminosæ*, just sprouting. *Holcus Sorghum*, Lettuce, Flax, Poppy, Cumin, and Coriander produce at this season a rich carpet of the liveliest green.

Cairo stands half on the Desert, and half on the alluvial deposit, so that you may enter it amongst gardens, avenues, and richly-cultivated fields, and step from the gates on the other side into utter sterility. On the east portion you see no one but a solitary Arab on his Dromedary, or occasionally a long caravan of laden camels, breaking the horizon of rock and sand; whilst the river-ward suburbs are crowded with laden asses, camels, men, women, and children, all busy carrying or planting and sowing, ploughing or irrigating, so densely packed, dirty, and disorderly, that it is impossible to conceive by what governing power they can be made profitable servants and subjects.

The Rhoda Gardens are situated on a long island which divides the Nile at Cairo, and upon the end of which the celebrated Nilometer is placed. The first thing which strikes you on entering them is the want of Exotics. All Eastern gardens are, you know, mere collections of the common and more ornamental *native* plants, arranged in straight lines to suit an Eastern taste, and crowded together to produce shade and masses of green to rest the eye upon; hence the Rhoda Gardens are disappointing at first sight, for they present neither the extreme variety of our English botanic or pleasure gardens, nor the perfectly artificial and formal luxuriance of Shooobra. Rhoda is, however, really and truly the *Dropmore* of Egypt, and it is quite marvellous what has

been done in the way of introducing exotic trees, under difficulties such as no other Botanic garden ever had to surmount. St. Petersburg may shut out her frosts, and Calcutta moderate her heats; but no human ingenuity can counteract the inundation of the Nile at one season, or fend off the hot blast from the desert at the succeeding one. Even the cold at Cairo is sometimes very trying to vegetation, especially at nights, so that the plants have to contend with every disadvantage.

I had but a very few minutes to spent at Rhoda, during which Mr. Traill kindly took me round part of the gardens, and pointed out what was of most interest. With the box of cuttings from Kew he was much pleased; all appeared in excellent condition, though, alas, few of them have even a chance of succeeding. I did not perceive any definite plan or arrangement in the gardens: the first object here, as everywhere in the East, is shade, and it is afforded by a profusion of the trees common about Cairo, and mentioned above. The walks were generally bordered by hedges of *Lawsonia* or *Parkinsonia*, and sometimes Myrtles, whilst Rosemary takes the place of Box. Sixty acres are laid out in walks, thus bordered by hedges or trees, inclosing square or variously-formed *areae*, among which many interesting trees of all countries have been planted, with various success. The Passion-flower trailed luxuriantly and flowers abundantly. A fine little Banyan tree also thrives, at the expense of much labour and ingenuity on Mr. Traill's part, who brings pots of water to the branches, so arranged that the roots dipped into them. All the genus *Ficus* do well, as do Mahogany, Logwood, *Casuarina*, *Sapindus Saponaria*, many *Acaciae*, *Pittospora*, *Eugenia*, and other *Myrtaceae*. Of shrubby things which throve, I observed *Turnera*, *Oleanders*, *Guilandina Bonduccella*, *Tamarix*, *Hibiscus*, *Gleditsia*, various *Dalbergiae*, one, the *Sissoo*, attaining the size of a tree, and yielding excellent timber in Egypt. Of the English, European, or N. American timber-trees, few prosper: *Araucaria imbricata* exists, and that is all; the *Oak* looks poorly; *Taxodium distichum* is yellow as a guinea, *Platanus orientalis* far from umbrageous. Cypresses are killed by the inundations of the Nile. The Asiatic

Teak even will not grow, owing to the wet at this period. The Palms are very capricious: some have succeeded admirably, as *Oreodoxa regia*, sent by Loddiges, *Latania Borbonica*, and some *Caryotas*; these, however, are individuals, forming no great features in a garden of sixty acres, though very handsome in themselves. Upon the whole the Rhoda Gardens are a noble project, more interesting to a botanist than ornamental, according to European taste. Everywhere you turn you are greeted by some English or well-known exotic, struggling to accommodate itself to Egyptian bondage, or rebelliously resenting all poor Mr. Traill's kind attentions, and doing the worst a slave can do—dying on the spot, and breaking his master's heart.

Some accounts of the Rhoda Gardens are published in the *Gardeners' Chronicle* by Mr. Traill himself, which I should have liked to have perused previous to my visit, but had no opportunity: they are, however, worth your referring to.

(*To be continued.*)

On the following day I determined upon a trip into the Desert, to see the *Fossil Forest*, as a large tract of country covered with fossil wood is called. Several of the officers of the "Sidon" joined me, of which I was very glad, for they kindly undertook all the provisioning for the day. We started very early, mounted upon jackasses: I also took a servant to carry my traps, together with two mules and attendants to bring back specimens of the wood. Though few plants were procurable, I was anxious to make observations on the temperature of the soil and dryness of the Desert, that I might know how near to the starving and burning point vegetation would exist, as supplementary to my many observations in the Antarctic Expedition of how much cold they can bear.

Our course lay to the south of Cairo, along the ridge of hills at whose Nileward termination the city is built. These hills are of limestone, and so were the first few miles of desert we traversed. We emerged from the town at the citadel, about two hundred feet above the Nile, the rest of the town, and Great Desert itself. The sun was rising when we passed the Palace, and a very grand sight it was. It rose from the eastern Desert, hot, orange-red, and scorching to behold. A few strips of cloud on the horizon crossed its upward path, and through them was darted a flood of great beams slanting along the parched soil, dancing on the polished alabaster Mosque close by us, and shooting across the Nile to the Pyramids on the far-west horizon, some ten miles off. To the east, south, and south-east, stretched a fiery desert; below, we saw the town of Cairo bristling with minarets, and the long shining Nile, wending its way from south to north through emerald-green pastures, gardens, Date-groves, and scattered white buildings, its surface spotted with latteen-sailed boats. This green belt reached to the very base of the Pyramids, and was there met by another apparently endless desert, covered with a light haze, and backed by low hills of sterile sand. After a little space, another desert horizon rose with the light far to the south, the Nile again glanced in it like a twisted silver wire, its course marked by still other pyramids, so distant as to appear no

more than dusky triangular spots. Beyond these, the site of Thebes, Memphis, Luxor, Edfou, the far-away Cataracts, and Meroe are seen only in the imagination. Of the appearance of the Pyramids themselves from this point one can form no idea: they are not beautiful, and much of their interest is derived from association; but they are so strongly interwoven with the earliest recollections of our species, and of our school-education, that it is impossible to keep the eyes or thoughts from them.

For the first few miles out of Cairo there was scarce a trace of vegetation, or merely a few exposed stems here and there above the naked soil, wholly destitute of leaves. This is the sterile season, and past even seed-time in the Desert, which is, of course, not affected by the inundations of the Nile. About five or six miles south of Cairo the scenery changes totally, the country being more broken up into broad valleys with steep cliffy piles of limestone on each side, and every here and there a little vegetation, *Zygophylleæ*, *Rutaceæ*, *Capparideæ*, a spiny cruciferous plant, some tufts of grass, and a *Hyoscyamus*, full of leaf all the year round, brilliantly green, and very succulent, which resembles a *Chenopodium*, and spreads straggling along the ground. Some *Zygophylleæ* are also green; but the few other species I saw were small-leaved, withered things. Of trees and bushes there are none. All the soil is limestone rock, with a profusion of sand and pebbles, and occasionally fragments of fossil-wood. As we proceeded, the bits of fossil-wood became more and more frequent and larger, till, about eight or ten miles S. E. of Cairo, the whole pebbly and rocky soil of the plain part of the Desert consisted of fossil-wood, chiefly rolled pebbles and fragments, but now and then huge trunks, prostrate and half-buried in the sand, always broken up into truncheons. Most of them were heaped together in the greatest confusion: more rarely, individual trees lay isolated, frequently 70 feet long, some 120, and it is said even 140. Their colour is generally dark reddish-brown: they are all chalcedony and agate of a coarse description, with the rings of the wood well preserved. The sandy limestone (full of shells) and soil of the Desert are

white ; so that this fossil vegetation contrasted curiously with the general appearance of the country. Here the Pacha had sunk a pit for coal, sapiently concluding that so much fossil-wood above-ground indicated no less below. He however did not get through the limestone rock, which is subjacent to the formation to which I presume the fossil-wood belongs. Contrasted with the surrounding sterility, this record of a once luxuriant vegetation is a very impressive object, for it is not confined to a few miles only of Desert, but (I am given to understand) extends forty or fifty in one direction. I do not at all suppose that these forests ever characterized the Desert, or the land now replaced by desert, in its present relation to the general features of Egypt. On the contrary, I expect that the fossil-trees were imbedded in layers of conglomerate and sandstone which have been gradually destroyed by the ocean, leaving the silicified trees to resist, for the greater part, the action of that surf by which the softer rock was triturated, forming the sand and pebbles of the Desert. About one hundred miles above Cairo the sandstone rocks commence and the limestone ceases ; and as on the Nile behind Cairo detached masses of the same sandstone rock as the statue of Memphis is cut from occur, so it appears probable that this pebbly bed with fossil-trees belonged to that series of rocks, all of which, south of lat. 29° , are washed away, leaving only the agatized trees, all grievously water-worn, many being ground up with the sand into pebbles. A white snail was very abundant everywhere, feeding on the *Zygophylla* and cruciferous plants. This mollusk does not occur south of 29° , i. e., of the limit of the limestone.

After lading my sorry beasts with as many specimens as they could conveniently carry, we turned back and arrived late in the evening at Cairo, thoroughly tired, drenched with perspiration, and very shaken with the long donkey-ride. My plants amounted to six species in all, none different from what I afterwards saw in crossing from Cairo to Suez. Besides the pleasure I derived from the wonderful Fossil Forest, the first peep of anything so novel as the

Desert and its concomitant features was highly gratifying. Everything was new : the sky and the atmosphere were unlike those of any other part of the world, and did not appear as if they extended over a soil where either animal or vegetable life could exist. In the limestone desert I had no wish to tarry ; but I should still enjoy a visit to the sandstone wastes of Middle and Upper Egypt, which are probably yet more barren, and accompanied by moving sands, of which we here see nothing.

On re-entering Cairo we passed the Tombs of the Caliphs, formerly wonderful for their eastern beauty and ornament, and still presenting immense and beautifully decorated Mausolea, but all falling to ruin. In the moonlight they are striking objects, from their peculiar character and the loveliness of their situation. The sunset over the Pyramids was as glorious as the sunrise, and as fiery hot ; this time, however, we had the green groves and cool-looking palaces of the Pacha at Shoobra in the fiery circuit. We waited outside the gates to witness the full effect of the moon on the city, citadel, minarets, and distant pyramids ; but the devotional feelings of my donkey (who seemed much impressed by the tombs of the Caliphs) prevented my enjoying thoroughly the view. The entrance to the town was through a once magnificent gate, much ornamented, and very grand-looking in the twilight, but surrounded by so much wretchedness, squalor, and filth, that it was impossible to bestow my admiration on it.

On the following day I was engaged to dine at the Consul-General's, a brother of the Honourable Captain Murray, R.N., our acquaintance at Richmond Park, and had barely time to dress, when I received a message from Lord Dalhousie informing me that he had determined to start at 8 o'clock that night. The fact was that, through some mistake of the Telegraph, the Transit passengers were supposed not to have arrived the night before at Alexandria. All the luggage had been forwarded, and I was in consternation, having only two hours to pack up, to send my fossils home, and go to the Consul's, whence we were to start. We were prohibited taking anything but a tiny carpet-bag a-piece ;

I therefore hired a fleet dromedary for my goods (my heavy things had gone to the palace on arriving, and were forwarded with Lord Dalhousie's). On arriving at the Consul's just in time, I found Lady Dalhousie had a dromedary provided for her extras, which would convey some of my baggage; and the kindness of the suite, especially Dr. Bell, induced the Transit officers to give us an additional van, so that I got all taken on with us. Lord and Lady Dalhousie dined in their travelling garb; and I did not scruple to show myself at the Consul's, where an immense crowd was assembled in hopes of spending an evening with the Governor-General. All the nobility were there, wearing splendid jewels and uniforms, besides many European ladies and gentlemen in their own or in Egyptian costumes. I never was so glad in my life as when I got my things all stowed away, though at the expense of relinquishing my scanty collection and all but some sheets of small-sized paper for the Desert and Aden. A few minutes later (except the Governor-General had waited or left a van for me), and I should have had to go across on a dromedary, and been shaken to small pieces.

Our departure by cresset and torch light was very pretty: we were surrounded by Orientals in all costumes, curious-looking Egyptian officers of every rank from the Pacha's agents down to the camel and van-drivers. Lord and Lady Dalhousie mounted a beautiful barouche, as good as ever *the Park* saw, with six Arab horses and two outriders, and dashed off at full speed, the cressets and torches speeding on before through the narrow streets, whipping everybody and everything in the way. The vans, in which we all followed, held four a-piece: they resemble exactly short Omnibuses or long Minibuses, but have only two wheels with broad tires, and four horses each. A cad stands on the step behind: an Egyptian drives at a furious gallop, equipped with a red Fez cap and long whip. In the first van were Dr. Bell and myself with my luggage, so arranged that we could lie along. I had a plaid for the night, and my two barometers slung round my neck. Bell, an old Indian, who is always chilly, was bundled

up in all imaginable clothes, European and Oriental. We had no refreshment but claret, which owing to our hurried departure was my sole share of the Consul's dinner. In the second van were Fane, Courtenay, Captain Henderson, and our Dragoman, who belonged to the Transit office. In the third, the butler, coachman, lady's maid, and a native (Hindû) woman, an Ayah or servant. This was all our force. For the first part of the road we were terribly jolted; and I began to fear it was too true that no one could transport barometers safe (mine are so yet) by the overland route. We stopped every three or four miles to bait or change horses. The night was bright starlight and clear, and we were all in excellent spirits. The stations are large rambling buildings, lone houses in the Desert, with never a tree or other dwelling near them: they are white-washed, one or two stories high, generally one, and amply supplied with beer, wines, and all sorts of eatables, just now when the mails are passing: at other times nothing is to be had. Our whole journey from Alexandria to Suez was at the Pacha's expense (except my own when living at Cairo), and we were certainly handsomely feasted, housed, and honoured, and also transported, considering the country we passed through. Lord Dalhousie gave a most liberal "Backsheesh" to the various servants, for the time from our leaving the "Sidon" on Sunday mid-day, until arriving at Suez on the following Friday afternoon.

At 5 o'clock in the morning we came to a half-way house, and halted for two hours. I walked out, as soon as day dawned, at a quarter past six: the Desert was a large bed of gravel, all pebbles as far as the eye could reach, except when the long, low, steep piles of limestone occurred, and these were far off. The pebbles were sometimes arranged in lines of heaps, having sandy intervals, whereon were scattered plants of *Hyoscyamus*, some Grasses, *Rutaceæ*, *Capparideæ*, *Heliotropium* (?) and *Zygophylla*. Altogether there were not five individuals of any kind to an acre of surface. The soil was chilled by nocturnal radiation, and the pebbles were covered with dew of only 41° temperature, the air in

the shade being 47° . In digging down, the temperature gradually rose one degree for every inch down to ten inches, beyond which I could not dig. Even in this winter-time, I found the sun's rays give a heat of 100° to the soil; so that the poor plants have to undergo in winter a change of 56° every day. Here the only water they get is by the dew forming on them during the night. Unhappy plants! supposing their feelings to be like ours, who desire to drink most when most heated.

At 7 o'clock, we breakfasted and were off again. The sun soon became powerful, and clouds of dust entered our van, almost suffocating the inmates. I got out for a few minutes at every stage, and saw the poor horses covered with sweat: the moment they were unharnessed, they threw themselves on the ground, and rolled in the sand in ecstasy. I could not help thinking of the Prophet's injunction in the Koran, that the Faithful should wash in the sand where no water was to be procured. We passed some little Oases, a few yards long, sparkling with the *Hyoscyamus*, and here and there a solitary stag-headed inclined *Acacia*; but we never stopped near these less sterile spots.

We had been gradually ascending from Cairo, and at forenoon of Friday we reached the highest ground on our road (800 or 900 feet, perhaps,) between the Nile and the Red Sea. Here high ridges of red mountains appeared, their long precipitous sides all cut up into shallow ravines, dreadfully rugged, rocky, and barren. From the height I saw the Red Sea lifted up by refraction long before we sighted it really, and the mountains of the peninsula of Sinai and Tor on the opposite side of the gulf of Suez: all deeply interesting objects, especially to one who had been accustomed to much novelty of a totally different character. Except a few insects (*Grylli*, &c.,) and occasionally a herd of antelopes, there is no animal life in these parts of the desert. Now and then, however, solitary Arabs or small encampments may be seen, surrounded by dromedaries and packages of merchandize. These Arabs are an unruly set, and not remarkable for their attachment to the Pacha, whose road from Cairo to Suez they are

heavily bribed to keep in some sort of order. In many places the latter is really good, as where the flats of pebbles are broad and long, from which the Arabs remove the large stones, though so long only as they are paid for doing it, for as soon as the money is stopped, they will replace all the biggest stones, and thus render the track impassable.

From the highest level, to the Red Sea at Suez, is one uninterrupted slope of eight miles long, apparently so uniform and smooth that you might fancy rolling a cannon-ball from the top into the sea: it is uniformly covered with pebbles and rounded lumps of rock, as big as the head. The *Colocynth* was the only plant I saw here, and that very sparingly: it straggles, and is of the same hue almost as the soil, the great yellow apples alone betraying its existence. The valley, or rather flat slope, is many miles broad, and bounded to the south by high rugged hills, hot, red, and hazy: it is, indeed, a howling wilderness; and the desert of Sinai opposite looked no better.

There was scarcely a boat (but the steamer) visible on the sea; and Suez itself on the shore wore a truly desolate appearance, with no green thing near it. At 4 o'clock we entered the town, a miserable collection of mud and stone huts, with a crazy Mosque, and a large white hotel on the sea-brink, at which we were set down.

This being the position of the passage of the Children of Israel, we could not help looking about and trying to grasp some natural feature that might afterwards vividly recall the spot, but there was none: looking north, an arm of the sea wound up to where a canal in the more glorious days of Egypt connected the Nile and the Red Sea; a few low hills there bounded the horizon. Westward lay the unbroken sweep of Desert we had bowled along at full gallop a few minutes before; southwest, the rugged hills which characterize a great part of the western shore of the Red Sea. To the east, the water was about two miles across or thereabouts, bounded by a long flat, from which rise the mountains of the peninsula of Sinai. Due south, the unruffled and unbroken waters of the Red Sea stretched away, far as the eye could see, with three steamers lying a few miles off the shallows

which surround Suez. These were the "Precursor" of the Peninsular and Oriental Company waiting the passengers from England, the "Semiramis," H.E.I.C. Navy, which had brought Sir C. Napier from Bombay, and would have taken us to Calcutta had we come before the arrival of the "Moozuffer," a finer vessel despatched for us.

I could find no vegetation of any kind about Suez, either on land or at sea; all is (at this season) utterly sterile. Our inn, though large, was poor, and offered miserable accommodation for Lady Dalhousie, who was greatly fatigued. At 10 o'clock, P.M., the Transit passengers began to arrive, one hundred and thirty in all, in detachments of six or eight vans every four hours. In the first were no friends of mine. At 2 or 3, A.M., the second detachment brought Col. Hearsey and son; at 8, A.M., our Edinburgh friends arrived, whom I was delighted to meet again.

Lady Dalhousie was recovered enough to go on board at 4 o'clock, P.M., and after the usual expenditure of gunpowder, we got under weigh at 6, and sailed rapidly down the Red Sea. This is a noble ship, as large as the "Sidon," but we are shamefully accommodated, the Indian Government having made no sort of arrangement whatever for us. Capt. Etherally gives up everything for Lord and Lady Dalhousie, whose accommodations, though confined, are splendidly fitted and ornamented: he has also provided a magnificent table, sumptuous in every way. The officers are agreeable, and we are, in everything but accommodation, very comfortable. This is in every respect a man-of-war, the Indian navy being a very small force, similarly constituted and officered with the Royal navy.

The north part of the Red Sea, as far as the island of Jibbel Zeer, is totally devoid of interest, except the view of Mount Sinai. The winds were northerly, as far as 20° lat., then light and variable, and the weather oppressively hot and sultry until about 16° or 17° lat., where cooler southern breezes prevail, blowing stronger as you approach the Strait, with a nasty sea running. At about 20° lat. a good deal of *Sargassum* is always seen, retained there (I expect) by currents or winds, as in the "*Sargasso*" Sea.

The islands we passed were masses of cinders and scoriæ, red and black, quite barren and fearfully inhospitable, with shores steep to the water's edge: all are volcanic cones. We saw none of them near the shore, where coral reefs occur, which render the southern part of the sea highly dangerous. During the last two or three days on the Red Sea, it blew very strong, and we lost our boatswain overboard, who was struck by the paddle-wheel and killed on the spot. The only feature of interest was some patches of red scum, probably of animal matter, tinged by the confervoid plant described by Montague in the *Annales* (*Trichodesmium erythræum*, I think he calls it); it was far too bad weather to get any, but it is frequent here, and said to be equally so in the Persian gulf: it is also reported to be phosphorescent at night. In the afternoon of the 17th, we passed Mocha, a long town of white houses and minarets close to the sea, backed by rugged, barren mountains. At 7 o'clock the same night, we passed through the famous Strait of Babel Mandeb, by a narrow passage, a quarter of a mile wide, between the east mainland of Arabia and a flat island, and entering the Indian Ocean we steamed on to Aden, arriving on the forenoon of the 18th. All the Indian surveying officers, of whom there were several on board, agree that the name *Red* Sea is derived from that of the Nubian shore, *Raid* or *Red*, and not from the occasionally discoloured waters.

I have been much interested with some of the phenomena of the Red Sea. The winds always blow up and down it, a fact which is not wonderful, though the southern end is in the N.E. and S.W. monsoon, and the northern end within the westerly wind limits. The curious thing is, that the north wind blows all the year round, from Suez to about 20° S. lat., and the south wind nearly all the year from the Straits to Jibbel Zeer island, between which is a broad belt of calms and variables with hot weather and much more vapour than at either extremity. Again, though the north winds always prevail from Suez southwards to 20° lat., all that portion of the sea is higher than the middle or lower part, and twenty-four feet higher than the Mediterranean. It is also much

salter than any other part, or than any other sea in the East, the saltness decreasing from Suez to 20° lat., where and from whence to the Straits the sea is no salter than the Indian Ocean, which does not differ from the Atlantic or Pacific.

Aden, Dec. 19th.

Aden is one of the most remarkable places I ever saw, and I only wonder that so little has been heard of it. It is a great, black, barren volcano, long extinct and of great age, starting abruptly from the ocean opposite the flat shore of Arabia, with which it is connected by a long, low, flat spit of sand. To the west of it is a smaller, but somewhat similar, peninsula of rugged rocks. They are like to the volcanic islands of the southern part of the Red Sea and some parts of the coast of Africa, but altogether different from the S.W. end of Arabia. The long low beach is richly wooded with Acacias, Dates, and Mangroves, I am informed; but it is impossible to land there without being taken prisoner by the Arabs, whom we deprived of Aden. Ships do not lie off the shore, but at the N.W. end of the peninsula, and sheltered from the N.E. monsoon now blowing strong; and there are the coal depôts, a solitary hôtel, and one or two houses of officials. The peninsula is one mass of volcanic rock, 1,700 feet high, a very ancient volcano, in short, whose crater is broken down to the eastward, where the town is placed. In this respect it resembles St. Helena, but is as sterile to look at as Ascension, or more so; for the top of Green Mountain (in Ascension) is *green*; while here, except in a few flat places near the coast, no green thing is to be discerned from the sea. Quite three-fourths of the rock are inaccessible, the upper part consisting of a wall extraordinarily jagged and serrated, several miles long, many parts of which are no broader than a horse's back. This wall sends off spurs; so that take the peninsula where you will, you have a full front; and cut it down where you may, there is always a pointed perpendicular section. The wall forms the rim of the crater and is all but inaccessible; the slopes and land at the base are all volcanic cinders, strata of lava, dykes of basalt, and such like. Upon the whole, it is the ugliest, blackest, most desolate, and most dislocated piece

of land, of its size, that ever I set eyes on; and I have seen a good many ugly places.

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Aden we took from the Arabs a few years back, and are now fortifying it as strongly as Gibraltar, which in position it resembles. At no very distant period it was held by the Turks, who relied much upon it, and have left wonderful constructions in all parts of the Peninsula, in the shape of tombs, aqueducts, the remains of a large town now buried underneath the miserable Arab village of Aden, and more especially fortifications on the all-but inaccessible crests of the hills, with stone roads and causeways leading to them, constructed with inconceivable labour, as it is supposed, by Jews, many of whom were kept as prisoners and slaves at Aden. The Sublime Porte still claims a jurisdiction over all Arabia, to which the Arabs are, of course, indifferent, detesting the Turks and Franks equally.

We lay off the west end of the peninsula, the cool end of the island, where Capt. Haines, Ind. Navy, resides, and superintends the arrangements for vessels, &c. He is also the E.I.C. political Agent or Resident in the place, and acts as Governor. The town is now half Arab and half European, from the number of troops, and occupies the base of a large valley bounded by inaccessible black crags on all sides, open to the south and to the east, and defended to the west by a very narrow fortified pass, through which you go when following the excellent road from the "Point," where we lay, to the town or cantonments.

On our arrival we were surrounded by shore-boats, full of a race of negroes from the opposite coast of Africa, "Soumalis," who are engaged with Hindoos and a few Arabs as servants on the peninsula. These "Soumalis" are all but naked, and left their boats for the water, in which they swam like ducks, diving for sixpenny-pieces, which we chucked overboard, some dozens scrambling underwater for possession. Captain Haines provided quarters for us all at his house, a set of long rambling cottages with verandahs, built, as is every house here, of wattle and plaster, and

swarming with rats and mosquitoes. We managed tolerably well, however, during our short stay. At about 2 o'clock the "Precursor" arrived, and as soon as I could get away I went on board, and saw our friends Mr. and Mrs. S., who came on shore for a donkey-ride in the cool of the evening. The steepness and ruggedness of the black crags, utterly devoid of vegetation, the curious ridges of Trap, and beds of scoria, Lava, and Pumice, which extend from their bases to the sea, and the wild disconnected rocks that rise here and there from the ocean close to the shore, render the scenery most striking, and in the moonlight awfully grand, more especially in twilight or sunset, when the exquisitely delicate colouring of the sky and the few scattered clouds that speckle it, contrast singularly with the wild features of the land. In the gravelly hollows a very few plants are seen, woefully wide apart, and never in sufficient quantity to give a verdant hue to even an acre of ground at this season; but I am told that grass appears in spring. The most conspicuous plant is a bushy green *Capparis* (Caper) and next a large *Reseda* (Mignonette), the commonest plant in the island: next comes a large herbaceous *Capparis* with bright golden flowers; and then rusty-looking *Acacia* bushes, and some odd-looking *Euphorbias*. The shores are bold and rocky, yielding rock-oysters, but destitute of *Algæ*.

On Sunday morning we started very early for the cantonment or town, four miles off. The Governor-General, Courtenay, Capt. Haines, and myself, were all the party. Our conveyance was a pretty French barouche with four horses: our road, an excellent one, wound along the beach opposite the Arab shore. At the neck of the peninsula is a steep hill leading to the "Gorge," which connects the valley of Aden with the rest of the peninsula; and here we left the carriage for Arab horses, all except the Governor, who had a Palanquin, while the carriage was dragged up after us through the fortified pass. At this place we ascended a hill to survey the fortifications, and obtain a view of the disputed points and modes of attack and defence. The scene was very grand, overlooking the flat sandy isthmus, with its Turkish and Arab forts and walls, similar to that neck connecting Gibraltar

with the mainland of Spain. Below lay a village close to the neck, on a salt plain studded with houses belonging to the Hindoos employed in the fortifications, who spotted the plain with their white dresses. Around were all sorts of forts, guns, and black sepoy soldiers; behind, the towering mural crags of the peninsula full of holes whitened from the number of Vultures which are seen wheeling across the cliffs. Looking north, the eye detects the long sandy waste of the isthmus, with the sea on either hand, succeeded by a belt of green woods along the Arab coast; and in the distance a long yellow desert, backed by ranges of high mountains said to abound in fertile valleys blooming with the Rose of Shiraz, the Apple, Vine, and Apricot, Melon, and all the delicious flowers and fruits of Persia and Araby the blest. What a contrast to our present site! And it is from these distant hills that Aden is constantly supplied with vegetables, brought for sale by the Arabs. To the right of this position is the great black gulph in which Aden is built, a sort of valley of Acheron, unblest by water or any verdure, sprinkled with the white hovels of the natives, and, scarcely better, the long cantonments of the troops. On both sides are valleys, long steep naked gorges which run up the flanks of the mountains, mysterious-looking rents, leading to a distant black flat, which on this side of the island extends along the base of the highest ridge. This highest ridge is, as well as the spurs it gives off, in every point of view, remarkable, being always a serrated wall or knife-edge of rock, apparently inaccessible, but crowned here and there with the ruins of Turkish castles. To one of them an excellent Turkish road from the flat still exists, by which I afterwards ascended to a signal station. On various parts of the slopes above the town are tanks, cut under the cliffs, or built of fine stone wonderfully cemented, and there still exist the remains of an aqueduct, leading from the peninsula across the long neck of land to the Arabian shore.

At the town we went to Capt. Haines' official house, where he is endeavouring to wheedle garden plants into growth, and has succeeded with some short-lived annuals, which only want a winter; but the rest of those, whose duration is longer, perish with the

following dry season. The heat of this valley is always 10° above that of the "Point," and the residents are all but roasted alive. At the Residency (Capt. Haines') we were met by the Assistant Polit. Agent, Lieut. Cruttenden, I.N., and the Civil Surgeon, Dr. Vaughan, successor to Dr. Malcolmson, whose absence I much regretted. In Cruttenden I recognized a contributor to the Transactions of the Royal Geological Society. He is a very agreeable and intelligent officer, and an experienced traveller in Nubia, Abyssinia, East Africa, and Arabia.

After breakfast we went to the chapel, a good wattle barn, built by subscription, and having Punkahs over the seats. The chaplain, an excellent man, startled me by the announcement of the following Saturday being Christmas-day; for I had latterly kept no account of the weeks and months, and there was little to remind one of it in the atmosphere. In the evening, while the Governor-General took some needful repose, I went to the top of the ridge or highest part of the island, "Shumsun," as it is called, 1700 feet of elevation. I had two "Soumalis" to carry my things, a large umbrella, broad white hat, with a round pillow on the crown, and a bolster round the rim outside, which keep the sun's rays from striking through the hat to one's head. We scrambled up one of the gullies over stony barren hills that led to the flat. The latter is about 800 feet up, a black waste of volcanic cinders, utterly destitute of vegetation or life, and so heated that the atmosphere for some feet above it flickered like smoke. Though now mid-winter it was dreadfully hot, the soil below the surface being 107° at 2, P.M., which must be far below the summer heat. A few valleys occur here and there, and these are sprinkled with vegetation, some shrubby milky *Euphorbiaceæ* and *Asclepiadeæ*, several gummy *Acacias*, the *Reseda*, four or five *Capparideæ*, shrubby and herbaceous, one or two wiry grasses, and a very common plant belonging probably to *Pedalineæ*. About the plains the ridge of rocks runs like a wall, some four miles long, curiously jagged at the top, which towered 1,000 feet above my head, and appeared inaccessible, except in one place, where a steep slope led to a cleft in the ridge, and up whose steep

face a zigzag road was formed: to this I directed my course. At the foot of the rocks I found a few more plants in the beds of the dry water-courses; but none were in flower. All were Arabian-looking, *Antichorus*, *Tephrosia*, *Polygala*, *Amaranthaceæ*, *Acacias*, *Rutaceæ*, and *Capparideæ* always prevailing, with a frutescent *Lycium*. The shrubs were in woeful and dead-like plight, having very stout distorted spiny stems, short, woody branches, few leaves, and no flowers. A leafless, pale yellow-white, dichotomous *Euphorbia* was perhaps the most common.

The road to the top of the ridge was remarkable, where perfect, but much of it is broken away: the workmanship is so good that no one suspects the Turks of having constructed it, but people assert that it was formed, as well as the crowning forts, by captive Jews, under Solyman the Magnificent. The stones are of excessively hard vitreous basalt, more or less squared, placed side by side without cement or mortar, and so well fitted that in some places the causeway seems to ride, like a saddle, on the knife-edge ridge. At other parts the sides of the cliffs are hewn away, and I was constantly startled by the road apparently terminating abruptly over a tremendous precipice; but it was really carried up at an acute angle behind me. Towards the top I met with two specimens of a plant which I recognised to be the same as a shrub shown to me by Dr. Lindley some two years ago, at the gardens of the Hort. Society. It has a curious stem eight or ten feet high, expanding like a trumpet at the base, a few short branches and rounded lobed leaves. I saw no young plants, nor fruit, nor flower, and could only reach a twig from the road. The Hort. Society plants were, if I remember rightly, covered with *Dufourea flammea*, and were probably from another part of the island. At this elevation, 1,500 feet, I met with Lichens, on the rocks, crustaceous species, and on *Acacia* stems, *Roccella* and *Ramalina*; but no other *Cryptogamia*. The road met the ridge at a curious cut, as it were, in the wall; and on reaching the latter, a general view opened out of the west side of the peninsula, the bay, and steamers at anchor off the "Point," where Capt. Haines' house is situated. Our own vessel, with her lofty masts, was

lying quietly at anchor ; but the poor "Preeursor" was kicking up the water, splashing, struggling, and backing off a bank on which she had grounded when getting under weigh six hours before, as I afterwards heard.

A similar causeway to that by which I ascended was carried along the ridges, but much of it has fallen away from time to time, on each side of the mountain ; and a little pathway only leads to the summit, up which is a broad flight of steps, formed of cut stones laid side by side. At the top there is a signal station, and a soldier on duty, who, besides signalizing the shipping, takes meteorological observations. The lone creature lives in a hut built in an excavation of the summit, which is hardly broad enough for ten persons to stand upon, and he never sees any one but a "Soumali" servant or an Arab, who daily brings him water. I was very thirsty, but he had nothing but tepid water to offer me. This rocky crest is, of course, very barren of everything but Lichens, of which there is a fair sprinkling ; but I had no time to stay to collect them. My descent was less fatiguing ; though the causeway is formed of such slippery stones that it tired me as much as the ascent. Exclusive of the few plants, some forty species, there is little to be gained by the hot and dusty ascent of "Shumsun," always excepting the remarkable views, and the curious works of the Turks.

On the Monday morning I went out at day-break to gather what plants I could find in the cooler valleys facing the west : they were more luxuriant than on the eastern side, the soil being more gravelly ; but still sterility was the order of the day. I added about twenty kinds to my former collection, but nothing remarkable on a casual inspection, or attractive at this flowerless season. Along the beach I did not procure a single maritime plant, nor an *Alga* : a dichotomous-leaved *Poa*, and a *Cyperus*, both growing in scattered tufts, occupying all the sand, whilst the rocks were invariably naked. Further back, the *Cleome* was abundant, with several smaller *Capparideæ*, the universal *Reseda*, some herbaceous and shrubby *Euphorbiaceæ* and *Leguminosæ*. A small weeping tree, ten feet high, possibly *Osyris*, was the largest plant. Several

Zygophylleæ, *Fagoniæ*, and some *Rubiaceæ* were plentiful; a fili-form *Mathiola* (?) and a suffrutescent *Campylanthus*, a pretty Acanthaceous plant, two *Labiataæ*, one *Boraginea*, and some *Scrophularineæ* were also common. A fine fox crossed my path; but I saw none of the apes which are said to be common on the rocks, and thus to strengthen the resemblance between this peninsula and that of Gibraltar. Before 9 o'clock, A.M., the heat became considerable, and I was glad to get back to Capt. Haines', with barely time enough for breakfast, and to get my collections put into paper before going on board and starting for Ceylon, where we arrived on the last day of the year, and where I found Gardner, who had been waiting our arrival at Colombo for three weeks, and then started for Point de Galle, where we were in company with His Excellency the Governor of Ceylon. He was looking well, and extremely happy, and is evidently in high favour with the authorities.

"Moozuffer," Madras Roads, Jan. 5, 1848.

Here we are at last off the shores of India, for I considered myself so at Ceylon, where we landed the other day. My last letter was from Aden, since when we have been on the Indian Ocean, the most uninteresting sea I ever crossed in my wanderings, without birds, or any fish but flying-fish, to relieve the monotony of the cruize. We sighted Cape Comorin last Thursday, and on Friday forenoon landed at Point de Galle, Ceylon, a few hours after the "Precursor," and with the same object in view, namely, to lay in coal for the rest of the voyage. I dare say you thought of us on Christmas day, and so we all did of England and English friends. You, I hope, were more comfortably circumstanced; for in addition to other discomforts we had adverse winds and a rolling sea. The "Moozuffer" which was sent to Suez for us, is in one sense a splendid vessel, more like a yacht than a man-of-war, but neither fitted nor provided with any accommodation suited to the Governor-General of India. The Captain has only the table to supply, &c., and this he has done well. Anything more sumptuous in the way of fare on board ship I never met with; but there are neither cabins nor bedding for any of his

Lordship's suite; and even the Captain gives up his cabin to Lord and Lady Dalhousie. We lie on mattresses on the deck and 'tis all we can do to turn out tidy for meals in the cabin, for breakfast at 9 o'clock, tiffin at noon, dinner at 4, and then we spend the evening any way we can. The motion of her powerful engine is such that we cannot write without difficulty, and we have no private cabin to sit in.

I have not made many sketches, none indeed since I left Cairo, where I made several of and from the Pyramids. At Aden I was far too busy botanizing; though, alas! nearly all my collections have been since destroyed by the salt water getting into our wretched dormitory on board the "Moozuffer." Not only did my *Hortus Siccus* suffer, but my spare paper also; so that in Ceylon I was unable to preserve a single thing. This I the less regret, as I shall have to take Ceylon on my way to Borneo, when I intend spending a week or two with Mr. Gardner at Kandy.

At Point de Galle we lay in a pretty little cove, surrounded by dense forests and wooded hills, the beach fringed with groves of Cocoa-nut Palms, and backed by forests of tropical trees of the greatest beauty. A more charming spot I never was in, reminding me altogether of the scenes described in Paul and Virginia. The Cinghalese are a curious people, slender and dark-coloured; the men all wearing long hair, which they gather up and fasten in a knot, at the back of the head, supporting the knot, as ladies do in England, with a tortoise-shell comb, smearing the whole abundantly with Cocoa-nut oil. Their houses are huts thatched with Palm-leaves, buried in groves of Cocoa-nuts and Areca or Betel-nut Palms, each cottage being overshadowed by the ample foliage of the Bread-fruit tree, one of the most luxuriant-looking trees of the tropics, thick and umbrageous, with dark green glossy leaves, and at all seasons laden with its noble fruit. The Plantain and Banana, too, are abundant everywhere, and the Pine-Apple springs up by the road-side, bearing excellent fruit, very little inferior to that grown in our English stoves. Flowers there are of all kinds, from the gaudiest and gayest to the most humble and delicate: butterflies, beetles, and gay birds all abound, and all one longs

for is the bracing air and far more wholesome, though less attractive, beauties of an English country scene. These are nice places to see, but not to dwell in, as the pale yellow, and all but sickly faces of the English children too plainly tell. Mosquitoes and sand-flies are rife, and so are detestable leeches, that get inside one's boot. Snakes, too, are said to be frequent, though I saw none of them.

The character of the natives is treacherous, and they are considered to be untrustworthy in their most trifling dealings, but they look happy, cheerful, and contented.

Our party was here divided into three. Lord and Lady Dalhousie went to a small Government residence (Government-House is at Kandy), Fane and Courtenay to the inn, whilst the Military Commandant, Major Cuthbert, kindly accommodated me for the night and day, or part of the two days we spent there. I had one long walk with Gardner (who had been waiting three weeks for my arrival) in the afternoon of Friday, another after daylight on Saturday morning (for Gardner and I sat up chatting all night), and a third after breakfast. It then came on to rain in true tropical style, as if it would beat the roofs in, accompanied by heavy thunder and lightning playing about us, as we sate taking tiffin in the open verandah, but neither Mrs. Cuthbert nor her little girls paid the very smallest attention to the storm, so habituated are all here to the strife of elements. I was very glad to have the opportunity of presenting Mr. Gardner to Lord Dalhousie before our departure. At 3 o'clock, P.M., we embarked under a heavy shower, which drenched the poor soldiers drawn out to salute us, and we started forthwith for Madras.

* * * * *

We arrived in Madras roads last Wednesday, at 11 o'clock, P.M. There is neither bay nor harbour, only a wide expanse of anchoring ground, like Yarmouth roads, but wanting all protection to seaward in the shape of sands; so that a constant rolling sea renders landing very difficult. Soon after our arrival, the Governor, His Excellency the Marquis of Tweeddale (who as you

know is the father of Lady Dalhousie) came on board, and invited us all to Government-House. He took Lady Dalhousie on shore with him, leaving Lord Dalhousie and us, his suite, till the afternoon; for it was necessary that we should land in state, and the troops could not be drawn up in the middle of the day. I was at first vexed by the loss of a day on shore, which, however, I did not afterwards regret, having had no idea what a fine thing an Oriental reception is.

Madras, as seen from the roads, is a long city on an extensive flat, without a rise of ten feet on any part, and the ranges of houses appear scattered and disjointed, from the number of trees planted amongst them. The amount of inhabitants is difficult to calculate, but there are not less than 5 or 600,000, a very large portion of whom had assembled to witness the landing of the Governor-General.

We had anchored at a distance of two miles from the shore, and at 4 o'clock in the afternoon, a very large boat came alongside, of the only kind fit for landing through the surf. These are about forty feet long, very high out of the water, flat-bottomed, wall-sided, and formed of planks of soft (Mango-tree) wood, sewed together with cord. They are pulled by about twenty black paddlers, who keep up a most discordant din by way of keeping time with the paddles, which are poles of some twenty feet in length, having a small round blade at the end. As we approached the shore, the whole beach, for miles, seemed alive with people, forming a moving mass of white turbans, black heads, white frocks, and black legs. Behind them the cavalry were drawn up, mingled with crowds of horsemen and carriages, and glittering with the bayonets of the troops. The nearer we approached, the more wonderful did this mass of human creatures appear; and we never ceased looking and wondering, till the motion of the boat told us we were in the surf of the beach. This was another and an equally curious spectacle. The steersman watched minutely every cresting wave, putting the boat round when any too big to be kept a head of us approached, and urging the paddlers, who screamed and yelled all the more discord-

antly as each surf tumbled beside the boat and carried her on the top of its foaming crest, letting her down bodily on the hard sand every time, with a crack that would break any ordinary vessel to pieces. Our boat, when fairly aground, was hauled a little way out of the rollers, opposite an alley in the crowd, where Lord Tweeddale and his staff stood ready to receive us. We landed one by one, in chairs carried by black fellows, who were so quick in their motions, that all four of us were out in half a minute. The guns in the battery immediately saluted, and the bands struck up "God save the Queen," while the English, who formed the greater part of the crowd nearest us, hurraed, greeted us with hats off and handkerchiefs, and the troops gave the military salute. We were introduced formally to Lord Tweeddale, who was gorgeous in his Governor's uniform, broad ribbons, stars, and orders, and especially in the attire and appearance of his body-guards, aides-de-camp, and staff. The aides stuck close to us; for the crowd drew round so fast that it was difficult to reach the carriages, of which there were four: one for Lord Dalhousie, and the second with Ladies Tweeddale and Dalhousie, who had come down to meet the Governor-General, the third for Fane and your humble servant, the fourth for Courtenay and Bell.

The start for the Government-House was very striking, for here we were kept clear of the crowd by the Governor's body-guard, a splendid troop of horse-soldiers, and all the cavalry regiments, the whole under arms, with the bands playing. We were no sooner in motion than a thousand carriages full of gaily dressed people started with us, together with horsemen and mounted ladies, and running natives, who escorted us the whole way to the Governor-General's house: ourselves being immediately surrounded by the staff-officers and aides-de-camp, splendidly dressed, and mounted on iron-grey Arab horses. The troops occupied a mile and a half on both sides, first the splendid Madras cavalry, then the European, and lastly the native infantry. As we passed each, the band played the National Anthem, and they kept up the salute till all the carriages had passed. It was a gorgeous and stunning sight, but marred in some degree

by the clouds of red dust which were carried along the road, and by the immoderate heat of the weather.

Government-House consists of two noble buildings, situated in a large grass-park, studded with trees of Mango, Date, Cocoa-nut, Peepul, Tamarind, and above all *Thespesia populnea*. The building where we alighted is the dwelling-house, of two stories, with pillared front and broad arcades all round. At the door we were received by the native servants, wearing white robes and turbans, broad scarlet belts edged with gold, and each bearing a brass badge. The public rooms are upstairs, large and lofty, built of brick covered with chunam, a preparation of lime plaster, fine and smooth as the best marble, of which all the interior work appeared built. The broad stairs are beautifully carpeted, and the landing-place surrounded with marble-like pillars and gilt arm-chairs. The rooms themselves are quite cut up by the large punkahs, which cross the lofty apartments from one side to the other beneath the glass chandeliers. The floors, too, are covered with yellow Chinese mats, for coolness sake, which take off from the effect of the rich yellow silk furniture. I had not been long in the drawing-room before I was accosted by Major Garsten, aide-de-camp to Lord Tweeddale, and Resident at the court of the Nabob of Arcot, whose palace-towers he showed me from the windows of Government-House, and who reminded me of occupying the same lodgings with him in Abercrombie Place (Edinburgh). He seemed highly delighted to see me, put his rooms, barouche and pair, and riding-horse at my disposal, and was as kind and attentive as possible.

There was but a small dinner party: the guests consisted chiefly of military gentlemen, among whom was General Cubbon, Political Agent for all Mysore, almost the first appointment in India, keeping state and honour like a Prince for all comers to Bangalore. The surgeon had come down with him, from whom I obtained a great deal of information about the cultivation of cotton in his part of India, where the heat and dryness of the summer cause wine-glasses to snap off at the stem without being touched, and Teak-wood tables to split across the grain. He

knew and spoke highly of Dr. Wight, as did many persons. My apartments were in Government-House, but detached; in fact, I had a house or Bungalow all to myself, with bed-room, sitting-room, and bath-room: all empty, hollow-like places with no windows, but the walls all round formed of Venetian blinds, mats for carpets, and the beds enclosed by mosquito curtains. Others of us had tents pitched close to the house, which were very pretty, and lined inside with chintz. Two of Lord Tweeddale's aides-de-camp live constantly in one of these tents, when at Madras; but the Governor very generally resides with his suite at a country-house called Ghindy, about seven miles off.

On Thursday morning we had to receive Admiral Inglefield of H.M.S. "Vernon," with Capt. Sir H. Blackwood of the "Fox," and several other naval officers from ships in the Madras roads. I was very anxious to see Sir. H. Blackwood, whose brother, also a captain in the R.N., I knew at Cambridge, and who is going in the "Fox" to survey the Teak forest of Moulmain, where he recommends Government to buy a large piece of land and to build a dock-yard which may supersede Bombay, the Teak of the Malabar coast being all destroyed by injudicious felling. Lord Dalhousie had intended staying only twenty-four hours at Madras, but was persuaded to hold a levée on Friday, so the rest of Thursday was spent in going on board the "Moozuffer" to fetch our clothes. In the evening I called on Mr. James Thomson, brother of Dr. R. D. Thomson of Glasgow, and a member of the mercantile house in which our late friend Gideon T. was a partner. From him I found that I could get Gideon's plant-collector up from Cape Comorin to Calcutta; and I expect to be able to retain him in my service at the rate of twenty or twenty-five rupees per month (2*l.* or 2*l.* 10*s.*). I had also to procure a Madras servant, if I possibly could; but I failed, after a great deal of trouble. The Madras servants, as is well known, will do more than a Bengalee, can speak a little English, and will stick to you longer, through all parts of the country: very essential qualities for a traveller. The one I first sent for was already engaged, the second wanted twenty rupees a month, which I cannot afford, because

I must have five servants (besides plant-collectors) at wages of from six to fourteen rupees a month, and the third, an old man, who was willing to come for ten, I did not like the look of, and thought I saw some flaws in his character; so, after a great deal of enquiry, I am obliged to wait till I get to Bengal. In the meantime my progress in the language is very slow.

In the town I saw a juggler carrying a hooded snake, the Cobra, a beautiful creature, but of rather a sickly yellow colour, which coiled round the man's neck, and suffered itself to be teased to frenzy. The juggler also swallowed an egg and brought it out by his ear, and performed other tricks, all common in India, but so familiar through early reading, that I cannot help mentioning them now that the reality is witnessed. At the dinner-party to day I had the pleasure to make acquaintance with Mr. and Mrs. Walter Elliott. Mr. E., son of a late Governor, is, I think, Colonial-Secretary, a very talented man, and fond both of antiquities and zoology. He asked me to breakfast with him the next morning, and gratified me with a sight of many curiosities and objects of antiquity.

In the afternoon of Friday we had to attend upon Lord Dalhousie during a levée, at which all the Madras people, civil and military, made their obeisance. It was held in a magnificent hall or banqueting-room, detached from Government-House, having a good deal the character of the noble Exchange-room in Glasgow.

I do not think I have any more about Madras worth relating to you. The little leisure I could spare was devoted to the Agro-Horticultural Society's Gardens, and to the inspection of Mr. Elliott's birds and animals.

Sir Laurence Peel's, Garden Reach,
Calcutta, Jan. 20th, 1848.

Here I am on the banks of the Hoogly at last, with our excellent friend Wallich's pet, the H.E.I.C. Botanic Garden, looking me full in the face from the side of the river opposite to where I now am.

J. D. H.

[The account of this garden and other matters relating to India, will occupy a second portion of these notes.—ED.]

